# OPTIONS

LEVEL

V2.M01

 X390 3.1.04 2012/08/17 13.12

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Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
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SYSIN       SYSD.ALGOLF.ASM(OPTIONS)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131246.RA000.T1OPT.OBJECT
SYSPRINT    JES2.JOB09267.SO0102
SYSUT1      SYS12230.T131246.RA000.T1OPT.SYSUT1
SYSUT2      SYS12230.T131246.RA000.T1OPT.SYSUT2
SYSUT3      SYS12230.T131246.RA000.T1OPT.SYSUT3
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  Active USINGs: None

  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                          X390 3.1.04  2012/08/17 13.12

                                       2 *                                                                    00002001
                                       3 *        COMPILER OPTIONS FOR THE ALGOL F COMPILER ARE SPECIFIED     00003001
                                       4 *        IN THE STAGE 1 SYSGEN MACRO ALGOL                           00004001
                                       5 *                                                                    00005001
                                       6 *        THE OUTPUT FROM STAGE 1 SYSGEN IS AN ASSEMBLY STEP          00006001
                                       7 *        INVOKING MACRO SGIEX001 WITH THE APPROPRIATE MACRO          00007001
                                       8 *        PARAMETERS PASSED TO IT FROM THE GLOBAL VARIABLES SET BY    00008001
                                       9 *        THE STAGE 1 ALGOL MACRO                                     00009001
                                      10 *                                                                    00010001
                                      11 *        REFER TO THE MVT 21.8 SYSTEM GENERATION MANUAL FOR ALGOL    00011001
                                      12 *        MACRO SPECIFICATIONS                                        00012001
                                      13 *                                                                    00013001
                                      14 *        THE STAGE 2 PROCESS FOR ALGOL IS THE ASSEMBLY OF            00014001
                                      15 *        SGIEX001 TO GENERATE CSECT IEX00001 WHICH IS LATER LINK     00015001
                                      16 *        EDITED WITH IEX00000 TO PRODUCE THE LOAD MODULE ALGOL       00016001
                                      17 *        WHICH IS THE POINT OF INVOCATION FOR THE COMPILER           00017001
                                      18 *                                                                    00018001
                                      19 *        TO AVOID THE COMPLEXITY OF RUNNING A STAGE 1 SYSGEN AND     00019001
                                      20 *        EDITING OUT ONLY THE STAGE 2 STEPS TO GENERATE THE          00020001
                                      21 *        ALGOL COMPILER OPTIONS, THE 2 MACROS HAVE BEEN COMBINED     00021001
                                      22 *        INTO AN ASSEMBLY. A SEPARATE LINK EDIT JOB SUBSEQUENTLY     00022001
                                      23 *        BUILDS ALL THE COMPILER LOAD MODULES.                       00023001
                                      24 *                                                                    00024001
                                      25 *********************************************************************** 00025001
                                      26 *                                                                  * 00026001
                                      27 *        SYSGEN GLOBAL FLAGS UTILIZED BY THE MACROS                * 00027001
                                      28 *                                                                  * 00028001
                                      29 *********************************************************************** 00029001
                                      30 *                                                                    00030001
                                      31          GBLB &SGALGOB(5)                                            00031001
                                      32          GBLA &SGALGOA(1)                                            00032001
                                      33          GBLB &SGQUITB                                               00033001
                                      34 *                                                                    00034001
                                      35 *********************************************************************** 00035001
                                      36 *                                                                  * 00036001
                                      37 *        ALGOL - REFER TO MVT RELEASE 21.8 SYSGEN MANUAL           * 00037001
                                      38 *                                                                  * 00038001
                                      39 *        GC28-6554-13 OS SYSTEM GENERATION RELEASE 21.8            * 00039001
                                      40 *                                                                  * 00040001
                                      41 *********************************************************************** 00041001
                                      42 *                                                                    00042001
                                      43          ALGOL SIZE=262144,                                         X00043001
                                                        PUNCH=NODECK,                                        X00044001
                                                        TYPERUN=LOAD,                                        X00045001
                                                        SORCODE=EBCDIC,                                      X00046001
                                                        SORLIST=SOURCE,                                      X00047001
                                                        PRECISN=SHORT                                         00048001
                                      44+*,    PUNCH OPTION IS NODECK                                         01-ALGOL
                                      45+*,    TYPERUN OPTION IS LOAD                                         01-ALGOL
                                      46+*,    SORCODE OPTION IS EBCDIC                                       01-ALGOL
                                      47+*,    SORLIST OPTION IS SOURCE                                       01-ALGOL
                                      48+*,    SIZE SPECIFIED IS 262144 BYTES OF MAIN STORAGE                 01-ALGOL
                                      49+*,    PRECISN OPTION IS SHORT                                        01-ALGOL

                                      51 *                                                                    00050001
                                      52 *********************************************************************** 00051001
                                      53 *                                                                  * 00052001
                                      54 *        SGIEX001 - STAGE 2 MACRO TO ASSEMBLE OPTIONS CSECT IEX00001 * 00053001
                                      55 *                                                                  * 00054001
                                      56 *********************************************************************** 00055001
                                      57 *                                                                    00056001
                                      58          SGIEX001 &SGALGOB(5),&SGALGOB(4),&SGALGOB(2),&SGALGOB(1),  X00057001
                                                        &SGALGOB(3),&SGALGOA(1)                               00058001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                          X390 3.1.04  2012/08/17 13.12

                                          +*                                                                      01-SGIEX
                                          +*        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                   01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        FUNCTION/OPERATION -                                          01-SGIEX
                                          +*        THIS MODULE IS A COLLECTION OF DATA AND WORKING STORAGE       01-SGIEX
                                          +*        WHICH MUST BE READILY ACCESSIBLE TO MORE THAN ONE             01-SGIEX
                                          +*        COMPILER PHASE                                                01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        R13 -> THIS MODULE DURING THE ENTIRE COMPILATION              01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        ENTRY POINTS - N/A                                            01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        INPUT - N/A                                                   01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        OUTPUT - N/A                                                  01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        EXTERNAL ROUTINES - N/A                                       01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        EXITS - NORMAL - N/A                                          01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        EXITS - ERROR - N/A                                           01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        TABLES/WORK AREAS -                                           01-SGIEX
                                          +*        THE FOLLOWING AREAS ARE PERMANENTLY ASSIGNED DURING THE       01-SGIEX
                                          +*        WHOLE COMPILATION -                                           01-SGIEX
                                          +*        1. SAVEAREA, REGISTER SAVEAREA IN THE STANDARD FORMAT         01-SGIEX
                                          +*        2. DCBTABLE, DCB ADDRS FOR ALL DATASETS USED                  01-SGIEX
                                          +*        3. STARTING AT EODUT1, END OF DATA EXIT ADDRESSES FOR         01-SGIEX
                                          +*           SYSUT1, SYSUT2, SYSUT3 AND SYSIN                           01-SGIEX
                                          +*        4. COMPFLGS, FOUR BYTES WITH VARIOUS SWITCHES AND             01-SGIEX
                                          +*           INDICATORS FOR CONTROLLING THE PROGRAM FLOW                01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*           ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -              01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*           PURPOSE                   POSITION                         01-SGIEX
                                          +*                                     BYTE 1    BYTE 2    BYTE 3       01-SGIEX
                                          +*                                     01234567  01234567  01234567     01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*           COMPMODE (SYNTAX CHECK)    X                               01-SGIEX
                                          +*           SUBSCRIPT OPTIMIZATION      X                              01-SGIEX
                                          +*           WARNING ERROR                X                             01-SGIEX
                                          +*           SERIOUS ERROR                 X                            01-SGIEX
                                          +*           TERMINATING ERROR              X                           01-SGIEX
                                          +*           PROCEDURE/PROGRAM               X                          01-SGIEX
                                          +*           LONG/SHORT PRECISION             X                         01-SGIEX
                                          +*           OPERAND                           X                        01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*           NOSOURCE/SOURCE                      X                     01-SGIEX
                                          +*           NOLOAD/LOAD                           X                    01-SGIEX
                                          +*           NODECK/DECK                            X                   01-SGIEX
                                          +*           ISO/EBCDIC                              X                  01-SGIEX
                                          +*           PROGRAM INTERRUPT                        X                 01-SGIEX
                                          +*           TERMINATING PHASE ENTERED                 X                01-SGIEX
                                          +*           NO BUFFERS ASSIGNED                        X               01-SGIEX
                                          +*           NO COMPILATION POSSIBLE                     X              01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*           SYSPRINT DOWN                                  X           01-SGIEX
                                          +*           WHOLE SOURCE PROG IN CORE                       X          01-SGIEX
                                          +*           NO OPTAB                                         X         01-SGIEX
                                          +*           SYSPRINT NOT OPENED                               X        01-SGIEX
                                          +*           ERROR UNRELATED TO SEMICOLON NR                    X       01-SGIEX
                                          +*           NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)      X      01-SGIEX
                                          +*           60 CHARACTER SET                                     X     01-SGIEX
                                          +*           (RESERVED)                                            X    01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        5. STARTING AT SIZE, MISC CONTROL INFORMATION                 01-SGIEX
                                          +*        6. STARTING AT ERRPOOL, ADDR POINTERS TO THE ERROR            01-SGIEX
                                          +*           POOL AND THE SOURCE PROGRAM BUFFER 1                       01-SGIEX
                                          +*        7. STARTING AT INBLKS, A TABLE OF THE LENGTHS OF I/O          01-SGIEX
                                          +*           BUFFERS AND OTHER AREAS                                    01-SGIEX
                                          +*        8. PAGEHEAD, THREE HEADLINES TO BE PRINTED AT THE TOP         01-SGIEX
                                          +*           OF EVERY PAGE                                              01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        THE FOLLOWING AREAS ARE USED ONLY DURING CERTAIN PHASES       01-SGIEX
                                          +*        OF THE COMPILATION, AS INDICATED IN THE ASSEMBLY              01-SGIEX
                                          +*        LISTING. FOR THIS REASON, SOME OF THEM OVERLAY EACH           01-SGIEX
                                          +*        OTHER, AND ANY SPACE NOT RESERVED DURING A CERTAIN PHASE      01-SGIEX
                                          +*        MAY BE USED AS WORKING SPACE BY THAT PHASE                    01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        9.  PRELPOOL, A PRELIMINARY ERROR POOL USED DURING THE        01-SGIEX
                                          +*            FIRST PART OF THE INITIALIZATION PHASE                    01-SGIEX
                                          +*        10. DCB FOR SYSIN                                             01-SGIEX
                                          +*        11. PBTAB2, PBTAB1, FSTAB, TABLES USED BY CERTAIN             01-SGIEX
                                          +*            PHASES                                                    01-SGIEX
                                          +*        12. DCB FOR SYSUT1                                            01-SGIEX
                                          +*        13. SPTAB, GPTAB, TABLES USED BY SCAN I/II AND SCAN           01-SGIEX
                                          +*            III                                                       01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        THE REMAINING SPACE UP TO 4K IS USED AS WORKING               01-SGIEX
                                          +*        STORAGE                                                       01-SGIEX
                                          +*                                                                      01-SGIEX
                                          +*        NOTES -                                                       01-SGIEX
                                          +*        THIS MODULE IS ASSEMBLED AT SYSTEM GENERATION TIME THE        01-SGIEX
                                          +*        OPTION SWITCHES IN COMPFLGS ARE INITIALIZED TO REFLECT        01-SGIEX
                                          +*        THE DESIRED DEFAULT OPTIONS. THE ASSEMBLED MODULE IS          01-SGIEX
                                          +*        LINKAGE EDITED WITH THE MODULE IEX00000 TO FORM THE           01-SGIEX
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.12

                                    156+*        RESIDENT PART OF THE COMPILER DIRECTORY                     01-SGIEX
                                    157+*                                                                    01-SGIEX
                                    158+*        THIS MODULE IS MAPPED BY THE DSECT WORKAREA. ANY CHANGES    01-SGIEX
                                    159+*        MUST ALSO BE REFLECTED IN THE WORKAREA DSECT                01-SGIEX
                                    160+*                                                                    01-SGIEX
000000                00000 00DA7   161+IEX00001 CSECT                                                       01-SGIEX
                                    162+*                                                                    01-SGIEX
                                    163+         EXTRN IEX00SYN,IEX00ED1,IEX00EDI                            01-SGIEX
                                    164+*                                                                    01-SGIEX
000000 0000000000000000             165+SAVEAREA DC    18F'0'                                                01-SGIEX
                                    166+*                                                                    01-SGIEX
                                    167+*        DCB ADDRS                                                   01-SGIEX
                                    168+*                                                                    01-SGIEX
000048                              169+DCBTABLE DC    0F'0'                                                 01-SGIEX
000048 00000000                     170+ALINDCB  DC    V(IEX00LIN)         SYSLIN                            01-SGIEX
00004C 00000000                     171+         DC    A(0)                NOT USED                          01-SGIEX
000050 00000000                     172+         DC    A(0)                  ..                              01-SGIEX
000054 00000000                     173+         DC    A(0)                  ..                              01-SGIEX
000058 00000418                     174+ASYSDCB  DC    A(SYSIN)            SYSIN DCB RESIDENT IN THIS MODULE 01-SGIEX
00005C 00000000                     175+APRTDCB  DC    V(IEX00PRT)         SYSPRINT                          01-SGIEX
000060 00000000                     176+APCHDCB  DC    V(IEX00PCH)         SYSPUNCH                          01-SGIEX
000064 00000578                     177+AUT1DCB  DC    A(SYSUT1)           SYSUT1 DCB RESIDENT IN THIS MODULE 01-SGIEX
000068 00000000                     178+AUT2DCB  DC    V(IEX00UT2)         SYSUT2                            01-SGIEX
00006C 00000000                     179+AUT3DCB  DC    V(IEX00UT3)         SYSUT3                            01-SGIEX
                                    180+*                                                                    01-SGIEX
                                    181+*        END OF DATA EXIT ADDRS                                      01-SGIEX
                                    182+*                                                                    01-SGIEX
000070 00000000                     183+EODUT1   DC    A(0)                SYSUT1                            01-SGIEX
000074 00000000                     184+EODUT2   DC    A(0)                SYSUT2                            01-SGIEX
000078 00000000                     185+EODUT3   DC    A(0)                SYSUT3                            01-SGIEX
00007C 00000000                     186+EODIN    DC    A(0)                SYSIN                             01-SGIEX
                                    187+*                                                                    01-SGIEX
                                    188+*        OPTION SWITCHES IN COMPFLGS SET BY SYSGEN OPTIONS           01-SGIEX
                                    189+*                                                                    01-SGIEX
000080 00220000                     190+COMPFLGS DC    BL2'0000100010',BL2'0'                                01-SGIEX
                                    191+*                                                                    01-SGIEX
                                    192+*        OPTION SWITCHES IN COMPFLGS                                 01-SGIEX
                                    193+*                                                                    01-SGIEX
                      000FB         194+PGR      EQU   X'FB'                                                 01-SGIEX
                      00004         195+PROC     EQU   X'04'                                                 01-SGIEX
                                    196+*                                                                    01-SGIEX
                      000FD         197+SHRT     EQU   X'FD'                                                 01-SGIEX
                      00002         198+LNG      EQU   X'02'                                                 01-SGIEX
                                    199+*                                                                    01-SGIEX
                      00001         200+OPERAND  EQU   X'01'                                                 01-SGIEX
                      00080         201+COMPMODE EQU   X'80'                                                 01-SGIEX
                                    202+*                                                                    01-SGIEX
                                    203+*        ERROR SEVERITY INDICATORS IN COMPFLGS                       01-SGIEX
                                    204+*                                                                    01-SGIEX
                      00020         205+WERR     EQU   X'20'                   WARNING ERROR                   01-SGIEX
                      00010         206+SERR     EQU   X'10'                   SERIOUS ERROR                   01-SGIEX
                      00008         207+TERR     EQU   X'08'                   TERMINATING ERROR               01-SGIEX
                                    208+*                                                                    01-SGIEX
                                    209+*        OPTION SWITCHES IN COMPFLGS+1                               01-SGIEX
                                    210+*                                                                    01-SGIEX
                      0007F         211+SRCE     EQU   X'7F'                                                 01-SGIEX
                      00080         212+NSRCE    EQU   X'80'                                                 01-SGIEX
                                    213+*                                                                    01-SGIEX
                      000BF         214+LOAD     EQU   X'BF'                                                 01-SGIEX
                      00040         215+NLOAD    EQU   X'40'                                                 01-SGIEX
                                    216+*                                                                    01-SGIEX
                      000DF         217+DECK     EQU   X'DF'                                                 01-SGIEX
                      00020         218+NDECK    EQU   X'20'                                                 01-SGIEX
                                    219+*                                                                    01-SGIEX
                      000EF         220+EBCDIC   EQU   X'EF'                                                 01-SGIEX
                      00010         221+ISO      EQU   X'10'                                                 01-SGIEX
                                    222+*                                                                    01-SGIEX
                                    223+*        TERMINATION SWITCHES IN COMPFLGS+1                          01-SGIEX
                                    224+*                                                                    01-SGIEX
                      00008         225+ERR      EQU   X'08'     PROG INTERRUPTION HAS OCCURED IN COMPILER     01-SGIEX
                      00004         226+TERM     EQU   X'04'     LAST PHASE HAS BEEN ENTERED                   01-SGIEX
                      00002         227+NOBUF    EQU   X'02'     ERROR POOL IS IN WORKAREA, NO SCE PROG BUFF 1 01-SGIEX
                      00001         228+NOGO     EQU   X'01'     COMPILATION IS IMPOSSIBLE, DO NOT START SCAN 1 01-SGIEX
                      00003         229+NOBUNOGO EQU   X'03'     NOBUF AND NOGO                                01-SGIEX
                                    230+*                                                                    01-SGIEX
                                    231+*        SWITCES IN COMPFLGS+2                                       01-SGIEX
                                    232+*                                                                    01-SGIEX
                      00080         233+PRT      EQU   X'80'                   SYSPRINT IS DOWN                01-SGIEX
                      00040         234+SPIC     EQU   X'40'                   SOURCE PROG IN STORAGE          01-SGIEX
                      00020         235+NOPT     EQU   X'20'                   NO OPTAB                        01-SGIEX
                      00010         236+PRTNO    EQU   X'10'                   SYSPRINT NOT OPENED             01-SGIEX
                      00008         237+NOSC     EQU   X'08'                   SEMICOLON COUNTER NOT VALID     01-SGIEX
                      00004         238+NOTEST   EQU   X'04'                                                 01-SGIEX
                      000FB         239+TEST     EQU   X'FB'                   EMBED SC COUNT IN CODE (DEFAULT) 01-SGIEX
                      00002         240+SET60    EQU   X'02'                   60 CHARACTER SET IS TO BE USED  01-SGIEX
                                    241+*                                                                    01-SGIEX
                                    242+*        MISCELLANEOUS CONTROL INFORMATION                           01-SGIEX
                                    243+*                                                                    01-SGIEX
000084 00040000                     244+SIZE     DC    F'262144'           AVAILABLE MAIN STORAGE - NOT USED 01-SGIEX
000088 00000000                     245+PICAADD  DC    V(IEX00PIC)         ADDR OF PICA OF THE COMPILER      01-SGIEX
00008C 00000000                     246+HDING    DC    F'0'                ADDR OF HEADING INFO OF THE INVOKER 01-SGIEX
000090 00000000                     247+ERET     DC    F'0'                RETURN ADDR FOR PROGRAM           01-SGIEX
                                    248+*                                  AND I/O ERRORS                    01-SGIEX
000094 0000000C                     249+PAGECNT  DC    PL4'0'              PAGE COUNT                        01-SGIEX
000098 0000                         250+LINCNT   DC    H'0'                COUNTER OF LINES PER PAGE         01-SGIEX
00009A 0038                         251+MAXLINES DC    H'56'               MAX NUMBER OF PRINT LINES PER PAGE 01-SGIEX
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.12

00009C 0000                           252+SEMCNT   DC    H'0'              SEMICOLON COUNTER                    01-SGIEX
00009E 0032                           253+PBN      DC    H'50'             HIGHEST PROGRAM BLOCK NUMBER         01-SGIEX
0000A0 0000                           254+KBN      DC    H'0'              HIGHEST CONSTANT POOL NUMBER         01-SGIEX
                      0001C           255+LATNR    EQU   28                NR OF LIBRARY STAND FUNCTIONS        01-SGIEX
                      0006C           256+LATBEG   EQU   4*(LATNR-1)                                            01-SGIEX
0000A2 006C                           257+LN       DC    AL2(LATBEG)       LAST USED DISPLACEMENT IN LAT        01-SGIEX
0000A4 00000000                       258+PRPT     DC    F'0'              PROGRAM POINTER                      01-SGIEX
0000A8 00000000                       259+SAVOUTA  DC    F'0'                                                   01-SGIEX
0000AC 00000000                       260+OUTAREA2 DC    F'0'              SYSPUNCH SAVE AREA                   01-SGIEX
0000B0 40404040                       261+PIDENT   DC    CL4' '            PROGRAM IDENTIFICATION               01-SGIEX
0000B4 0000000C                       262+CARDCNT  DC    PL4'0'            OBJECT PROGRAM DECK SEQ NUMBER       01-SGIEX
0000B8 00000000                       263+PRTRTADD DC    V(IEX00PRI)       ADDR OF PRINT ROUTINE                01-SGIEX
                                      264+*                                                                     01-SGIEX
                                      265+*        ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE    01-SGIEX
                                      266+*                                                                     01-SGIEX
0000BC 00000278                       267+ERRPOOL  DC    A(PRELPOOL)       FIRST BYTE OF PRELIMINARY ERROR POOL 01-SGIEX
0000C0 00000278                       268+NEXTERR  DC    A(PRELPOOL)       NEXT FREE PLACE IN ERROR POOL        01-SGIEX
0000C4 00000000                       269+ENDPOOL  DC    A(0)              LAST BYTE OF ERROR POOL-23           01-SGIEX
0000C8 00000000                       270+SRCE1ADD DC    A(0)              SOURCE PROGRAM BUFFER 1              01-SGIEX
0000CC 00000000                       271+SRCE1END DC    A(0)              ADDR OF LAST BYTE+1                  01-SGIEX
0000D0 00000000                       272+SULTSTRT DC    F'0'              IDENT OF LAST ITAB RECORD            01-SGIEX
                                      273+*                                                                     01-SGIEX
                                      274+*        TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                  01-SGIEX
                                      275+*                                                                     01-SGIEX
0000D4 0C80                           276+INBLKS   DC    H'3200'           MAX BLKSIZE FOR SYSIN     - NOT USED 01-SGIEX
0000D6 0E38                           277+PRTBLKS  DC    H'3640'           MAX BLKSIZE SYSPRINT      - NOT USED 01-SGIEX
0000D8 0C80                           278+LINBLKS  DC    H'3200'           MAX BLKSIZE FOR SYSLIN    - NOT USED 01-SGIEX
0000DA 0C80                           279+PCHBLKS  DC    H'3200'           MAX BLKSIZE FOR SYSPUNCH - NOT USED  01-SGIEX
0000DC 000007D0                       280+POOLS    DC    F'2000'           SIZE OF ERROR POOL                   01-SGIEX
0000E0 000007D0                       281+SRCE1S   DC    F'2000'           SIZE OF SOURCE PROG BUFFERS 1 AND 2  01-SGIEX
                      000E0           282+SRCE3S   EQU   SRCE1S            SIZE OF SOURCE PROG BUFFERS 3 AND 4  01-SGIEX
0000E4 00007FE0                       283+ITAB10S  DC    F'32736'          SIZE OF ITAB FOR PHASE 10            01-SGIEX
0000E8 000278D0                       284+ITAB20S  DC    F'162000'         SIZE OF ITAB FOR PHASE 20            01-SGIEX
0000EC 0000E290                       285+ITAB30S  DC    F'58000'          SIZE OF ITAB FOR PHASE 30            01-SGIEX
0000F0 00000E10                       286+CRIDTABS DC    F'3600'           SIZE OF CRIDTAB FOR PHASE 30         01-SGIEX
0000F4 00000578                       287+SUTAB30S DC    F'1400'           SIZE OF SUTAB BUFFER OF PHASE 30     01-SGIEX
0000F8 00000640                       288+LVTAB30S DC    F'1600'           SIZE OF LVTAB BUFFER FOR PHASE 30    01-SGIEX
0000FC 00000700                       289+OPTABS   DC    F'1792'           SIZE OF OPTAB BUFFERS 1 AND 2        01-SGIEX
000100 00006400                       290+SUTAB40S DC    F'25600'          SIZE OF SUTAB IN PHASE 40            01-SGIEX
000104 0000DAC0                       291+LVTAB40S DC    F'56000'          SIZE OF LVTAB IN PHASE 40            01-SGIEX
000108 00001800                       292+OOSTACKS DC    F'6144'           SIZE OF OPERATOR/OPERAND STACK       01-SGIEX
                                      293+*                                                                     01-SGIEX
                                      294+*        AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF         01-SGIEX
                                      295+*        EACH NEW PAGE                                                01-SGIEX
                                      296+*                                                                     01-SGIEX
                      0010C           297+PAGEHEAD EQU   *                                                      01-SGIEX
00010C 4040404040404040               298+PAGEHD1  DC    CL121' '               FIRST HEADLINE                  01-SGIEX
000185                00185 0010C     299+         ORG   PAGEHD1                                                01-SGIEX
00010C 40                             300+PAGEHD1C DC    C' '                   ASA CNTL                        01-SGIEX
00010D 4040404040404040               301+         DC    CL10' '                SPACER                          01-SGIEX
000117 4040404040404040               302+PAGEHD1D DC    CL100' '               PAGE TEXT HEADING               01-SGIEX
00017B                0017B 0017D     303+         ORG   PAGEHD1+113                                            01-SGIEX
00017D D7C1C7C5                       304+PAGEHD1P DC    CL4'PAGE'              PAGE                            01-SGIEX
000181 40404040                       305+PAGENUMB DC    CL4' '                 PAGE COUNTER                    01-SGIEX
000185                00185 00185     306+         ORG                                                          01-SGIEX
                                      307+*                                                                     01-SGIEX
000185 4040404040404040               308+PAGEHD2  DC    CL121' '               SECOND HEADLINE                 01-SGIEX
0001FE                001FE 00185     309+         ORG   PAGEHD2                                                01-SGIEX
000185 40                             310+PAGEHD2C DC    C' '                   ASA CNTL                        01-SGIEX
000186 4040404040404040               311+         DC    CL10' '                SPACER                          01-SGIEX
000190 4040404040404040               312+PAGEHD2D DC    CL100' '               PAGE TEXT HEADING               01-SGIEX
0001F4                001F4 001FE     313+         ORG                                                          01-SGIEX
                                      314+*                                                                     01-SGIEX
0001FE 4040404040404040               315+PAGEHD3  DC    CL121' '               THIRD HEADLINE                  01-SGIEX
000277                00277 001FE     316+         ORG   PAGEHD3                                                01-SGIEX
0001FE 40                             317+PAGEHD3C DC    C' '                   ASA CNTL                        01-SGIEX
0001FF 4040404040404040               318+         DC    CL10' '                SPACER                          01-SGIEX
000209 4040404040404040               319+PAGEHD3D DC    CL100' '               PAGE TEXT HEADING               01-SGIEX
00026D                0026D 00277     320+         ORG                                                          01-SGIEX
                                      321+*                                                                     01-SGIEX
                                      322+*        END OF STANDARD COMMON AREA                                  01-SGIEX
                                      323+*                                                                     01-SGIEX
                      00277           324+STANDX   EQU   *                                                      01-SGIEX
                                      325+*                                                                     01-SGIEX
                                      326+*        THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL           01-SGIEX
                                      327+*        PHASES AND PARTLY OVERLAY EACH OTHER                         01-SGIEX
                                      328+*                                                                     01-SGIEX
                                      329+*                            NAME OR PURPOSE        NEEDED BY PHASES  01-SGIEX
                                      330+*                                                                     01-SGIEX
000277 00
000278                                331+         DC    0F'0'                                                  01-SGIEX
000278 4040404040404040               332+PRELPOOL DC    236C' ',20C'X'  PRELIMINARY ERROR POOL     IEX10       01-SGIEX
000378                00378 00416     333+         ORG   PRELPOOL+414                                           01-SGIEX
                                      334+*                                                                     01-SGIEX
                                      335+*        DCB FOR SYSIN                                                01-SGIEX
                                      336+*                                                                     01-SGIEX
                                      337+         PRINT NOGEN                                                  01-SGIEX
                                      393+         PRINT GEN                                                    01-SGIEX
                                      394+*                                                                     01-SGIEX
000478                00478 00278     395+         ORG   PRELPOOL                                               01-SGIEX
000278                                396+PBTAB2   DS    CL510          PROGR. BLOCK TABLE 2          20-50     01-SGIEX
000478                                397+         DS    0F                                                     01-SGIEX
000478                                398+PBTAB1   DS    CL255          PROGR. BLOCK TABLE 1          11-20     01-SGIEX
000577                00577 00478     399+         ORG   PBTAB1                                                 01-SGIEX
000478                                400+FSTAB    DS    CL255          FOR STATEMENT TABLE           30-40     01-SGIEX
                                      401+*                             DCB FOR SYSUT1                11-30     01-SGIEX
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12
                                    402+*                                                                   01-SGIEX

                                    404+*                        DATA CONTROL BLOCK                        02-DCB
                                    405+*                                                                  02-DCB
000577 00
000578                              406+SYSUT1   DC    0F'0'                ORIGIN ON WORD BOUNDARY        02-DCB

                                    408+*                        DIRECT ACCESS DEVICE INTERFACE            02-DCB

000578 0000000000000000             410+         DC    BL16'0'               FDAD,DVTBL                    02-DCB
000588 00000000                     411+         DC    A(0)                  KEYLE,DEVT,TRBAL              02-DCB

                                    413+*                        COMMON ACCESS METHOD INTERFACE            02-DCB

00058C 00                           415+         DC    AL1(0)               BUFNO                          02-DCB
00058D 000001                       416+         DC    AL3(1)               BUFCB                          02-DCB
000590 0000                         417+         DC    AL2(0)          BUFL                                02-DCB
000592 4000                         418+         DC    BL2'0100000000000000'          DSORG                02-DCB
000594 00000001                     419+         DC    A(1)                  IOBAD                         02-DCB

                                    421+*                        FOUNDATION EXTENSION                      02-DCB

000598 00                           423+         DC    BL1'00000000'               BFTEK,BFLN,HIARCHY      02-DCB
000599 000000                       424+         DC    AL3(IEX00ED1)        EODAD                          02-DCB
00059C 80                           425+         DC    BL1'10000000'        RECFM                          02-DCB
00059D 000000                       426+         DC    AL3(0)               EXLST                          02-DCB

                                    428+*                        FOUNDATION BLOCK                          02-DCB

0005A0 E2E8E2E4E3F14040             430+         DC    CL8'SYSUT1'          DDNAME                         02-DCB
0005A8 02                           431+         DC    BL1'00000010'        OFLGS                          02-DCB
0005A9 00                           432+         DC    BL1'00000000'                       IFLG            02-DCB
0005AA 2020                         433+         DC    BL2'0010000000100000'   MACR                        02-DCB

                                    435+*                        BSAM-BPAM-QSAM INTERFACE                  02-DCB

0005AC 00                           437+         DC    BL1'00000000'                                  RER1 02-DCB
0005AD 000001                       438+         DC    AL3(1)               CHECK, GERR, PERR              02-DCB
0005B0 00000000                     439+         DC    A(IEX00SYN)          SYNAD                          02-DCB
0005B4 0000                         440+         DC    H'0'                 CIND1, CIND2                   02-DCB
0005B6 0000                         441+         DC    AL2(0)               BLKSIZE                        02-DCB
0005B8 00000000                     442+         DC    F'0'                 WCPO, WCPL, OFFSR, OFFSW       02-DCB
0005BC 00000001                     443+         DC    A(1)                 IOBA                           02-DCB
0005C0 00                           444+         DC    AL1(0)               NCP                            02-DCB
0005C1 000001                       445+         DC    AL3(1)               EOBR, EOBAD                    02-DCB

                                    447+*                          BSAM-BPAM INTERFACE                     02-DCB

0005C4 00000001                     449+         DC    A(1)                 EOBW                           02-DCB
0005C8 0000                         450+         DC    H'0'                 DIRCT                          02-DCB
0005CA 0000                         451+         DC    AL2(0)          LRECL                               02-DCB
0005CC 00000001                     452+         DC    A(1)                 CNTRL, NOTE, POINT             02-DCB
                                    453+*                                                                   01-SGIEX
0005D0                              454+         DS    0F                                                   01-SGIEX
0005D0                              455+SPTAB    DS    CL255           SCOPE TABLE              11-30       01-SGIEX
0006D0                              456+         DS    0F                                                   01-SGIEX
                      006CD         457+GPTAB    EQU   *-3             GROUP TABLE              11-30       01-SGIEX
0006D0                              458+         DS    CL1510                                               01-SGIEX
                                    459+*                                                                   01-SGIEX
                                    460+*        END OF SYMLIB PART OF COMMON WORK AREA                     01-SGIEX
                                    461+*                                                                   01-SGIEX
000CB6                00CB6 00DA6   462+         ORG   STANDX+2863                                          01-SGIEX
000DA6 F0                           463+         DC    C'0'                                                 01-SGIEX
                                    464+*                                                                   01-SGIEX
                                    465          END                                                        00059001
```

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| IEX00EDI | 1 | 00000000 | 00000004 | T | | | 163 | 360 |
| IEX00ED1 | 1 | 00000000 | 00000003 | T | | | 163 | 424 |
| IEX00LIN | 1 | 00000000 | 00000005 | T | | | 170 | 170 |
| IEX00PCH | 1 | 00000000 | 00000007 | T | | | 176 | 176 |
| IEX00PIC | 1 | 00000000 | 0000000A | T | | | 245 | 245 |
| IEX00PRI | 1 | 00000000 | 0000000B | T | | | 263 | 263 |
| IEX00PRT | 1 | 00000000 | 00000006 | T | | | 175 | 175 |
| IEX00SYN | 1 | 00000000 | 00000002 | T | | | 163 | 375 439 |
| IEX00UT2 | 1 | 00000000 | 00000008 | T | | | 178 | 178 |
| IEX00UT3 | 1 | 00000000 | 00000009 | T | | | 179 | 179 |
| LATBEG | 1 | 0000006C | | U | | | 256 | 257 |
| LATNR | 1 | 0000001C | | U | | | 255 | 256 |
| PAGEHD1 | 121 | 0000010C | 00000001 | C | C | | 298 | 299 303 |
| PAGEHD2 | 121 | 00000185 | 00000001 | C | C | | 308 | 309 |
| PAGEHD3 | 121 | 000001FE | 00000001 | C | C | | 315 | 316 |
| PBTAB1 | 255 | 00000478 | 00000001 | C | C | | 398 | 399 |
| PRELPOOL | 1 | 00000278 | 00000001 | C | C | | 332 | 267 268 333 395 |
| SRCE1S | 4 | 000000E0 | 00000001 | F | F | | 281 | 282 |
| STANDX | 1 | 00000277 | 00000001 | U | | | 324 | 462 |
| SYSIN | 4 | 00000418 | 00000001 | F | F | | 342 | 174 |
| SYSUT1 | 4 | 00000578 | 00000001 | F | F | | 406 | 177 |

X390 3.1.04 2012/08/17 13.12

```
Con Source      Members                                                                X390 3.1.04  2012/08/17 13.12

  1 SYS1.MACLIB
                DCB      IHB01
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
  4 SYSD.ALGOLF.MACLIB
                ALGOL    SGIEX001
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1OPT    STEPNAME: OPTIONS    PROCSTEP: X390

Primary input:  lines      1 to      59 of SYSD.ALGOLF.ASM(OPTIONS)

SYSLIB library records read: 2267

SYSUT1 work file size: 40568 bytes

SYSUT2 work file size: 196488 bytes

SYSUT3 work file size: 4720 bytes

SYSLIN file records written: 36

TXA000I Return code 0, elapsed time 0.75 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX00001 | 000378 | 158 |
| IEX00001 | 000478 | 255 |
| IEX00001 | 0005D0 | 2006 |
| IEX00001 | 000DA7 | 1 |

# IEX00

LEVEL

V2.M01

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX00)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131247.RA000.T1X00.OBJECT
SYSPRINT    JES2.JOB09268.SO0102
SYSUT1      SYS12230.T131247.RA000.T1X00.SYSUT1
SYSUT2      SYS12230.T131247.RA000.T1X00.SYSUT2
SYSUT3      SYS12230.T131247.RA000.T1X00.SYSUT3
```

Active USINGs: None

Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.12

```
*
*        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER
*
*        FUNCTION/OPERATION -
*        THIS MODULE HAS TWO FUNCTIONS -
*        1. IT PROVIDES THE INITIAL ENTRY POINT TO AND FINAL
*           EXIT POINT FROM THE ALGOL COMPILER
*        2. IT CONTAINS ROUTINES AND DATA WHICH MAY BE NEEDED BY
*           SOME OR ALL OF THE FOLLOWING COMPILER PHASES
*
*        ENTRY POINTS -
*        IEX00000 - INITIAL ENTRY POINT. MAY BE ENTERED BY AN
*                   JCL EXEC STATEMENT OR BY ANY ONE OF THE
*                   MACROS LINK, CALL, XCTL OR ATTACH
*        IEX00PIC - PROGRAM INTERRUPT ROUTINE
*        IEX00ED1 - END OF DATA ROUTINE FOR SYSUT1
*        EODAD2   - END OF DATA ROUTINE FOR SYSUT2
*        EODAD3   - END OF DATA ROUTINE FOR SYSUT3
*        IEX00EDI - END OF DATA ROUTINE FOR SYSIN
*                   (THE FOUR END OF DATA ROUTINES ABOVE ARE
*                   DUMMIES WHICH ONLY TRANSFER CONTROL TO THE
*                   ACTUAL ROUTINES, THE ADDRESSES OF WHICH HAVE
*                   BEEN STORED IN THE COMMON WORK AREA)
*        IEX00SYN - SYNCHRONOUS ERROR ROUTINE FOR ALL DATA SETS
*                   EXCEPT SYSPRINT
*        SYNPR    - SYNCHRONOUS ERROR ROUTINE FOR SYSPRINT
*        IEX00PRI - A COMMON SUBROUTINE FOR WRITING OUTPUT TO
*                   SYSPRINT
*
*        INPUT - N/A
*
*        OUTPUT -
*        THE SUBROUTINE PRINT EXECUTES ALL OUTPUT OPERATIONS ON
*        SYSPRINT
*        RECORD LENGTH IS 121 BYTES WITH ASA CONTROL CHARACTERS
*
*        EXTERNAL ROUTINES -
*        IEX00001 - THE COMMON WORK AREA
*        THIS IS NOT AN EXECUTABLE ROUTINE BUT RATHER A
*        COLLECTION OF TABLES, DATA AND WORK AREAS WHICH ARE
*        NEEDED BY SOME OR ALL OF THE COMPILER PHASES, THUS
*        SUPPLEMENTING THE FUNCTION OF THIS MODULE. IT IS
*        ASSEMBLED SEPARATELY AND LINKAGE EDITED WITH THIS
*        MODULE. ITS CONTENTS AND FORMAT CAN BE FOUND IN THE
*        DUMMY CONTROL SECTION WORKAREA
*
*        IEX10000 - THE COMPILER INITIALIZATION PHASE
*        THE WHOLE CHAIN OF COMPILER PHASES STARTING WITH
*        IEX10000 AND ENDING WITH IEX51002 CAN BE REGARDED AS A
*        SUBROUTINE TO THIS MODULE. IT IS ENTERED BY A MACRO
*        LINK EP=IEX10000. ON ENTRY, R0 CONTAINS THE ADDRESS
*        OF THE COMMON WORK AREA. CONTROL IS FINALLY RETURNED TO
*        THIS MODULE FROM IEX51002 BY A RETURN MACRO WITH THE
*        COMPLETION CODE IN R15
*
*        EXITS - NORMAL -
*        THE FINAL EXIT FROM THE COMPILER IS BY A RETURN MACRO
*        TO THE INVOKING PROGRAM. R15 CONTAINS A RETURN
*        CODE TO INDICATE WHETHER THE COMPILATION WAS SUCCESSFUL
*        OR NOT
*
*        EXIT FROM THE SUBROUTINE PRINT IS BY A RETURN MACRO
*        R1 CONTAINS THE ADDR OF A BUFFER AREA INTO
*        WHICH THE NEXT OUTPUT LINE CAN BE MOVED
*
*        EXITS - ERRORS -
*        EXIT FROM THE COMMON ERROR ROUTINES PIROUT, SYNAD AND
*        SYNPR IS NORMALLY TO AN ERROR ROUTINE WHICH IS PRIVATE
*        TO EACH COMPILER PHASE. THE ADDR OF THIS ROUTINE HAS
*        BEEN STORED IN ERET IN THE COMMON WORK AREA. HOWEVER, IF
*        THE PIROUT ROUTINE IS ENTERED FOR THE SECOND TIME, EXIT
*        IS MADE TO THE ROUTINE GOTOEND IN THIS MODULE WHICH IN
*        ITS TURN XCTL'S TO THE TERMINATING PHASE IEX51002
*
*        EXIT FROM THE ROUTINES SYNAD AND SYNPR IS BY LOADING
*        ERET INTO R15 AND BRANCHING
*
*        EXIT FROM THE ROUTINE PIROUT IS BY MOVING THE RETURN
*        ADDRESS INTO THE OLD PSW AND EXECUTING A RETURN MACRO.
*
*        TABLES/WORK AREAS -
*        SAVE     - THE SAVE AREA IN STANDARD FORMAT
*        IEX00PIC - THE PROGRAM INTERRUPT CONTROL AREA
*        SYSPRINT - DCB FOR SYSPRINT
*        SYSLIN   - DCB FOR SYSLIN
*        SYSPUNCH - DCB FOR SYSPUNCH
*        SYSUT2   - DCB FOR SYSUT2
*        SYSUT3   - DCB FOR SYSUT3
*        WORKAREA - THE COMMON WORKAREA IN THE EXTERNAL CONTROL
*                   SECTION IEX0001
*
*        ATTRIBUTES - NOT SERIALLY REUSABLE
*
*        NOTES -
*        THIS MODULE IS TO BE LINKAGE EDITED WITH THE COMMON
*        WORK AREA (MODULE IEX00001). THE RESULTING LOAD MODULE
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                    98 *        FORMS THE RESIDENT PART (IEX00) OF THE ALGOL COMPILER          00098001
                                    99 *                                                                       00099001
                                   100 *        THE OPERATION OF THIS MODULE DEPENDS UPON AN INTERNAL          00100001
                                   101 *        REPRESENTATION OF THE EXTERNAL CHARACTER SET WHICH IS          00101001
                                   102 *        EQUIVALENT TO THE ONE USED AT ASSEMBLY TIME                    00102001
                                   103 *                                                                       00103001
000000               00000 0049C   104 IEX00000 CSECT                                                          00104001
                                   105 *                                                                       00105001
                                   106 *        BIT PATTERNS                                                   00106001
                                   107 *                                                                       00107001
                     000F0         108 ONSW     EQU   X'F0'                ON SWITCH IN BRANCH INSTR           00108001
                     0000F         109 OFFSW    EQU   X'0F'                OFF SWITCH IN BRANCH INSTR          00109001
                                   110 *                                                                       00110001
                                   111 *        ENTRY POINTS                                                   00111001
                                   112 *                                                                       00112001
                                   113          ENTRY IEX00LIN,IEX00PCH,IEX00PRT,IEX00UT2,IEX00UT3             00113001
                                   114          ENTRY IEX00SYN,IEX00ED1,IEX00EDI,IEX00PIC,IEX00PRI             00114001
                                   115 *                                                                       00115001
                R:F  00000         116          USING IEX00000,R15                                             00116001
                                   117 *                                                                       00117001
                                   118          SAVE  (14,12),,'IEX00000 LEVEL 2.1 &SYSDATE &SYSTIME'          00118001
000000 47F0 F026           00026   119+         B     38(0,15)                         BRANCH AROUND ID        01-SAVE
000004 21                          120+         DC    AL1(33)                          LENGTH OF IDENTIFIER    01-SAVE
000005 C9C5E7F0F0F0F0F0            121+         DC    CL32'IEX00000 LEVEL 2.1 08/17/12 13.1' IDENTIFIER        01-SAVE
000025 F2                          122+         DC    CL1'2'                           IDENTIFIER              01-SAVE
000026 90EC D00C           0000C   123+         STM   14,12,12(13)                     SAVE REGISTERS          01-SAVE
                                   124 *                                                                       00119001
00002A 4120 F064           00064   125          LA    R2,SAVE                                                  00120001
00002E 50D0 F068           00068   126          ST    R13,SAVE+4                                               00121001
000032 5020 D008           00008   127          ST    R2,8(,R13)                                               00122001
000036 18D2                        128          LR    R13,R2                                                   00123001
000038 5800 F0B0           000B0   129          L     R0,=V(IEX00001)           R0 -> COMMON WORKAREA          00124001
                                   130 *                                                                       00125001
                                   131          LINK  EP=IEX10                  LINK TO PHASE 10               00126001
00003C                             132+         CNOP  0,4                                                      02-IHBIN
00003C 45F0 F050           00050   133+         BAL   15,*+20          BRANCH AROUND CONSTANTS                 02-IHBIN
000040 00000048                    134+         DC    A(*+8)           ADDR. OF PARM. LIST                     02-IHBIN
000044 00000000                    135+         DC    A(0)              DCB ADDRESS PARAMETER                  02-IHBIN
000048 C9C5E7F1F0404040            136+         DC    CL8'IEX10'        EP PARAMETER                           02-IHBIN
000050 0A06                        137+         SVC   6                 ISSUE LINK SVC                         01-LINK
                                   138 *                                                                       00127001
                                   139 *        TWO PARAMETERS ARE TRANSMITTED TO PHASE 10, R0                 00128001
                                   140 *        CONTAINS THE ADDR OF THE COMMON WORKAREA, R1 CONTAINS          00129001
                                   141 *        THE ADDR OF THE PARAMETER LIST OF THE INVOKER                  00130001
                                   142 *                                                                       00131001
                                   143 *        FINAL EXIT OF THE COMPILER                                     00132001
                                   144 *                                                                       00133001
                                   145 *        PHASE 51 GENERATED THE RETURN CODE IN R15                      00134001
                                   146 *        THE RETURN CODE IS PASSED BACK TO THE INVOKER                  00135001
                                   147 *                                                                       00136001
000052 05E0                        148          BALR  R14,0                                                    00137001
                R:E  00054         149          USING *,R14                                                    00138001
** TXA533W USING range overlaps prior USING at statement 116.
** TXA301I Record 138 in SYSD.ALGOLF.ASM(IEX00)
000054 58D0 E014           00068   150          L     R13,SAVE+4                                               00139001
                                   151 *                                                                       00140001
                                   152          RETURN (14,12),RC=(15)                                         00141001
000058 58ED 000C           0000C   153+         L     14,12(13,0)                      RESTORE REGISTER 14     01-RETUR
00005C 980C D014           00014   154+         LM    0,12,20(13)                      RESTORE THE REGISTERS   01-RETUR
000060 07FE                        155+         BR    14                               RETURN                  01-RETUR
                                   156 *                                                                       00142001
                                   157 *        SAVEAREA FOR THIS LEVEL OF CONTROL                             00143001
                                   158 *                                                                       00144001
000062 0000
000064 0000000000000000            159 SAVE     DC    18F'0'                                                   00145001
                                   160 *                                                                       00146001
0000B0                             161          LTORG                                                          00147001
0000B0 00000000                    162                =V(IEX00001)
                                   163 *                                                                       00148001
                                   164 *        THE FOLLOWING SECTION CONTAINS -                               00149001
                                   165 *        THE PROGRAM INTERRUPT CONTROL AREA                             00150001
                                   166 *        THE PROGRAM CHECK                                              00151001
                                   167 *        AND I/O ERROR ROUTINES                                         00152001
                                   168 *        THE PRINT ROUTINE AND THE DCBS FOR SYSLIN, SYSPUNCH,           00153001
                                   169 *        SYSPRINT, SYSUT2 AND SYSUT3                                    00154001
                                   170 *                                                                       00155001
                R:D  00000         171          USING WORKAREA,R13                                             00156001
                                   172 *                                                                       00157001
                                   173 *        PROGRAM INTERRUPT CONTROL AREA                                 00158001
                                   174 *                                                                       00159001
                                   175 IEX00PIC SPIE  PIROUT,((1,15)),MF=L                                     00160001
0000B4                             176+         CNOP  0,4              ALIGN PICA TO FULLWORD BOUNDARY    S    01-SPIE
0000B4 0F                          177+IEX00PIC DC    BL1'00001111'                           PROGRAM MASKS    01-SPIE
0000B5 0000BA                      178+         DC    AL3(PIROUT)       EXIT ROUTINE ADDRESS              S    01-SPIE
0000B8 7FFF                        179+         DC    BL2'0111111111111111'                                   +01-SPIE
                                      +                            THE INTERRUPT MASK BYTES 1 AND 2        01-SPIE
                                   180 *                                                                       00161001
                                   181 *        PROGRAM INTERRUPT ROUTINE                                      00162001
                                   182 *                                                                       00163001
                R:F  000BA         183          USING *,R15                                                    00164001
** TXA533W USING range overlaps prior USING at statement 149.
** TXA301I Record 164 in SYSD.ALGOLF.ASM(IEX00)
0000BA 9104 D081     00081         184 PIROUT   TM    COMPFLGS+1,TERM           PROG INTERRUPT IN              00165001
                                   185 *                                TERMINATING PHASE ?            00166001
0000BE 4710 F07C           00136   186          BO    TERMERR                   YES, BRANCH                    00167001
0000C2 9108 D081     00081         187          TM    COMPFLGS+1,ERR                                           00168001
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  Active USINGs: IEX00000+X'BA',R15  WORKAREA,R13  IEX00000+X'54',R14

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

0000C6 4710 F09A            00154   188          BO    ERRERR                  PROG INTERRUPT IN ERROR RTN      00169001
0000CA 9047 F08A            00144   189          STM   R4,R7,PISAVE            SAVE REGISTERS                   00170001
0000CE 5860 D0C0            000C0   190          L     R6,NEXTERR              ADDR OF NEXT BYTE IN ERROR POOL  00171001
0000D2 D201 6000 F206 00000 002C0   191          MVC   0(2,R6),=AL1(20,209)    PATTERN FOR MSG 209              00172001
0000D8 D201 6002 D09C 00002 0009C   192          MVC   2(2,R6),SEMCNT          SEMICOLON COUNTER                00173001
0000DE 9108 D082      00082         193          TM    COMPFLGS+2,NOSC         SEMICOLON COUNTER VALID ?        00174001
0000E2 4780 F030            000EA   194          BZ    *+8                     YES, BRANCH                      00175001
0000E6 9680 6000      00000         195          OI    0(R6),X'80'             INDICATE SCNTR NOT VALID         00176001
0000EA 1B77                         196          SR    R7,R7                   INITIALIZE INDEX                 00177001
0000EC 5851 0004            00004   197          L     R5,4(R1)                FIRST HALF OF PSW                00178001
0000F0 1B44                         198 LOOP     SR    R4,R4                                                    00179001
0000F2 8D40 0004            00004   199          SLDL  R4,4                    GET HALF A BYTE OF OLD PSW       00180001
0000F6 4247 6004            00004   200          STC   R4,4(R7,R6)             STORE FOR CONVERSION             00181001
0000FA 4177 0001            00001   201          LA    R7,1(R7)                INCREASE INDEX                   00182001
0000FE 4970 F208            002C2   202          CH    R7,=H'8'                PERFORM LOOP                     00183001
000102 4740 F036            000F0   203          BL    LOOP                    EIGHT TIMES                      00184001
000106 5850 1008            00008   204          L     R5,8(,R1)               SECOND HALF OF PSW               00185001
00010A 1B44                         205 LOOP2    SR    R4,R4                                                    00186001
00010C 8D40 0004            00004   206          SLDL  R4,4                    GET HALF A BYTE OF OLD PSW       00187001
000110 4247 6004            00004   207          STC   R4,4(R7,R6)             STORE FOR CONVERSION             00188001
000114 4177 0001            00001   208          LA    R7,1(R7)                INCREASE INDEX                   00189001
000118 4970 F20A            002C4   209          CH    R7,=H'16'               PERFORM LOOP                     00190001
00011C 4740 F050            0010A   210          BL    LOOP2                   EIGHT TIMES                      00191001
000120 DC0F 6004 F1F6 00004 002B0   211          TR    4(16,R6),=C'0123456789ABCDEF' TRANSLATE TO PRINTABLE HEX 00192001
000126 4166 0014            00014   212          LA    R6,20(R6)               UPDATE POINTER                   00193001
00012A 5060 D0C0            000C0   213          ST    R6,NEXTERR              TO ERROR POOL                    00194001
00012E 9608 D081      00081         214 FIRSTERR OI    COMPFLGS+1,ERR          SET ERROR ROUT SWITCH ON         00195001
000132 9847 F08A            00144   215          LM    R4,R7,PISAVE            RESTORE REGISTERS                00196001
000136 D202 1009 D091 00009 00091   216 TERMERR  MVC   9(3,R1),ERET+1          ADDR OF ERR RTN TO OLD PSW       00197001
00013C 9608 D080      00080         217          OI    COMPFLGS,TERR           INDICATE TERMINATING ERROR       00198001
                                    218 *                                                                       00199001
                                    219          RETURN                                                         00200001
000140 07FE                         220+         BR    14                                RETURN                 01-RETUR
                                    221 *                                                                       00201001
000142 0000
000144 0000000000000000             222 PISAVE   DC    4F'0'                   REGISTER SAVE AREA               00202001
                                    223 *                                                                       00203001
000154 D202 1009 F20C 00009 002C6   224 ERRERR   MVC   9(3,R1),=AL3(GOTOEND)   SET ADDR IN OLD PSW              00204001
                                    225 *                                                                       00205001
                                    226          RETURN                                                         00206001
00015A 07FE                         227+         BR    14                                RETURN                 01-RETUR
                                    228 *                                                                       00207001
                                    229          DROP  R15                                                      00208001
00015C 05F0                         230 GOTOEND  BALR  R15,0                                                    00209001
                 R:F  0015E         231          USING *,R15                                                    00210001
** TXA533W USING range overlaps prior USING at statement 149.
** TXA301I Record 210 in SYSD.ALGOLF.ASM(IEX00)
                                    232 *                                                                       00211001
                                    233          XCTL  EP=IEX51002             GOTO TERMINATING PHASE           00212001
00015E 0700                         234+         CNOP  0,4                                                      02-IHBIN
000160 45F0 F016            00174   235+         BAL   15,*+20            BRANCH AROUND CONSTANTS               02-IHBIN
000164 0000016C                     236+         DC    A(*+8)             ADDR. OF PARM. LIST                   02-IHBIN
000168 00000000                     237+         DC    A(0)                DCB ADDRESS PARAMETER                02-IHBIN
00016C C9C5E7F5F1F0F0F2             238+         DC    CL8'IEX51002'       EP PARAMETER                         02-IHBIN
000174 0A07                         239+         SVC   7                                 ISSUE XCTL SVC         01-XCTL
                                    240 *                                                                       00213001
                                    241          DROP  R15                                                      00214001
                                    242 *                                                                       00215001
                                    243 *        ENTRY OF THE END OF DATA EXIT ROUTINES                         00216001
                                    244 *                                                                       00217001
                      00176         245 IEX00ED1 EQU   *                                                        00218001
000176 58F0 D070            00070   246 EODAD1   L     R15,EODUT1              SYSUT1                           00219001
00017A 07FF                         247          BR    R15                                                      00220001
                                    248 *                                                                       00221001
00017C 58F0 D074            00074   249 EODAD2   L     R15,EODUT2              SYSUT2                           00222001
000180 07FF                         250          BR    R15                                                      00223001
                                    251 *                                                                       00224001
000182 58F0 D078            00078   252 EODAD3   L     R15,EODUT3              SYSUT3                           00225001
000186 07FF                         253          BR    R15                                                      00226001
                                    254 *                                                                       00227001
                      00188         255 IEX00EDI EQU   *                                                        00228001
000188 58F0 D07C            0007C   256 EODADIN  L     R15,EODIN               SYSIN                            00229001
00018C 07FF                         257          BR    R15                                                      00230001
                                    258 *                                                                       00231001
                                    259 *                                                                       00232001
                                    260 *        SYNAD ROUTINE (ENTRY POINT FOR SYSPRINT)                       00233001
                                    261 *                                                                       00234001
00018E 9680 D082      00082         262 SYNPR    OI    COMPFLGS+2,PRT          SET SYSPRINT DOWN SWITCH ON      00235001
000192 05F0                         263          BALR  R15,0                                                    00236001
                                    264 *                                                                       00237001
                                    265 *        SYNAD ROUTINE                                                  00238001
                                    266 *        FOR ALL DATA SETS EXCEPT SYSPRINT                              00239001
                                    267 *                                                                       00240001
                 R:F  00194         268          USING *,R15                                                    00241001
** TXA533W USING range overlaps prior USING at statement 149.
** TXA301I Record 241 in SYSD.ALGOLF.ASM(IEX00)
                      00194         269 IEX00SYN EQU   *                                                        00242001
000194 4120 1000            00000   270 SYNAD    LA    R2,0(,R1)               GET DCB ADDR                     00243001
                                    271 *                                                                       00244001
                                    272          CLOSE ((R2))                                                   00245001
000198                              273+         CNOP  0,4                               ALIGN LIST TO FULLWORD 01-CLOSE
000198 4510 F00C            001A0   274+         BAL   1,*+8                             LOAD REG1 W/LIST ADDR  01-CLOSE
00019C 00000000                     275+         DC    A(0)                              OPTION AND DCB ADDRESS 01-CLOSE
0001A0 5021 0000            00000   276+         ST    R2,0(1,0)                         STORE DCB ADDRESS      01-CLOSE
0001A4 9280 1000      00000         277+         MVI   0(1),128                          MOVE IN OPTION BYTE    01-CLOSE
0001A8 0A14                         278+         SVC   20                                ISSUE CLOSE SVC        01-CLOSE
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                                    279 *                                                                   00246001
                                    280          DROP  R15                                                  00247001
0001AA 05F0                         281          BALR  R15,0                                                00248001
                 R:F  001AC         282          USING *,R15                                                00249001
** TXA533W USING range overlaps prior USING at statement 149.
** TXA301I Record 249 in SYSD.ALGOLF.ASM(IEX00)
0001AC 5830 D0C0           000C0    283          L     R3,NEXTERR          STORE ERROR PATTERN              00250001
0001B0 D201 3000 F034 00000 001E0   284          MVC   0(2,R3),PTTRN210    IN ERROR POOL                    00251001
0001B6 D201 3002 D09C 00002 0009C   285          MVC   2(2,R3),SEMCNT                                       00252001
                 R:2  00000         286          USING IHADCB,R2                                            00253001
0001BC D207 3004 2028 00004 00028   287          MVC   4(8,R3),DCBDDNAM                                     00254001
                                    288          DROP  R2                                                   00255001
0001C2 4133 000C           0000C    289          LA    R3,12(R3)           UPDATE ERROR POINTER             00256001
0001C6 5030 D0C0           000C0    290          ST    R3,NEXTERR                                           00257001
0001CA 9608 D080     00080          291          OI    COMPFLGS,TERR       INDICATE TERMINATING ERROR       00258001
0001CE 9180 D082     00082          292          TM    COMPFLGS+2,PRT      SYSPRINT NOT AVAIL ?             00259001
0001D2 4780 F02E           001DA    293          BZ    SYNADX              NO, BRANCH, MUST BE OTHER DCB    00260001
0001D6 984E F0B8           00264    294          LM    R4,R14,SAVEP        RESTORE REGS FROM PRINT ROUTINE  00261001
0001DA 58F0 D090           00090    295 SYNADX   L     R15,ERET            EXIT TO ERROR ROUTINE            00262001
0001DE 07FF                         296          BR    R15                 IN CURRENT PHASE                 00263001
                                    297 *                                                                   00264001
0001E0 0CD2                         298 PTTRN210 DC    AL1(12),AL1(210)                                     00265001
                                    299 *                                                                   00266001
                                    300          DROP  R15                                                  00267001
                                    301 *                                                                   00268001
                                    302 *        PRINTS ONE LINE ON SYSPRINT                                00269001
                                    303 *                                                                   00270001
                                    304 *        IT ALSO TAKES CARE OF LINE COUNTING, PAGE COUNTING AND     00271001
                                    305 *        PRINTING OF HEADING LINES AT THE TOP AF EACH NEW PAGE      00272001
                                    306 *                                                                   00273001
                                    307 *        CALLING SEQUENCE -                                         00274001
                                    308 *        L     R15,PRTRTADD          ENTRY ADDR IN CWA              00275001
                                    309 *        BALR  R14,R15                                              00276001
                                    310 *                                                                   00277001
                                    311 *        ON RETURN, R1 -> PRINT BUFFER                              00278001
                                    312 *                                                                   00279001
                                    313 *        GENERAL REGISTERS                                          00280001
                                    314 *                                                                   00281001
                                    315 *        R6        LINE COUNTER                                     00282001
                                    316 *        R12       SYSPRINT DCB ADDR                                00283001
                                    317 *        R14       RETURN ADDR                                      00284001
                                    318 *                                                                   00285001
                 R:F  001E2         319          USING IEX00PRI,R15                                         00286001
** TXA533W USING range overlaps prior USING at statement 149.
** TXA301I Record 286 in SYSD.ALGOLF.ASM(IEX00)
0001E2 90EC F08E           00270    320 IEX00PRI STM   R14,R12,SAVEP+12                                     00287001
                                    321          DROP  R15                                                  00288001
0001E6 185F                         322          LR    R5,R15                                               00289001
                 R:5  001E2         323          USING IEX00PRI,R5                                          00290001
** TXA533W USING range overlaps prior USING at statement 149.
** TXA301I Record 290 in SYSD.ALGOLF.ASM(IEX00)
0001E8 58C0 D05C           0005C    324          L     R12,APRTDCB         R12 -> SYSPRINT DCB              00291001
0001EC 4860 D098           00098    325          LH    R6,LINCNT           TEST LINE COUNTER                00292001
0001F0 4960 D09A           0009A    326          CH    R6,MAXLINES                                          00293001
0001F4 47D0 5056           00238    327          BNH   PRINTL              NOT HIGH, NO NEED TO PRINT HEAD  00294001
                                    328 *                                                                   00295001
                                    329 *        PRINT HEADINGS                                             00296001
                                    330 *                                                                   00297001
0001F8 FA30 D094 50E7 00094 002C9   331          AP    PAGECNT,=P'1'       ADD ONE TO PAGE COUNT            00298001
0001FE D203 D181 50CA 00181 002AC   332          MVC   PAGENUMB,PAGEPATT   MOVE IN PAGE EDIT PATTERN        00299001
000204 DE03 D181 D096 00181 00096   333          ED    PAGENUMB,PAGECNT+2  FORMAT PAGE NUMBER               00300001
                                    334 *                                                                   00301001
                                    335 NOPAGENO PUT   (R12)               REQUEST QSAM BUFFER              00302001
00020A 181C                         336+NOPAGENO LR    1,R12                         LOAD PARAMETER REG 1   02-IHBIN
00020C 58F0 1030           00030    337+         L     15,48(0,1)           LOAD PUT ROUTINE ADDR           01-PUT
000210 05EF                         338+         BALR  14,15                LINK TO PUT ROUTINE             01-PUT
                                    339 *                                                                   00303001
000212 D278 1000 D10C 00000 0010C   340          MVC   0(L'PAGEHD1,R1),PAGEHD1 MOVE HEADING LINE 1 INTO BUFFER 00304001
                                    341 *                                                                   00305001
                                    342          PUT   (R12)               REQUEST QSAM BUFFER              00306001
000218 181C                         343+         LR    1,R12                         LOAD PARAMETER REG 1   02-IHBIN
00021A 58F0 1030           00030    344+         L     15,48(0,1)           LOAD PUT ROUTINE ADDR           01-PUT
00021E 05EF                         345+         BALR  14,15                LINK TO PUT ROUTINE             01-PUT
                                    346 *                                                                   00307001
000220 D278 1000 D185 00000 00185   347          MVC   0(L'PAGEHD2,R1),PAGEHD2 MOVE HEADING LINE 2 INTO BUFFER 00308001
                                    348 *                                                                   00309001
                                    349          PUT   (R12)               REQUEST QSAM BUFFER              00310001
000226 181C                         350+         LR    1,R12                         LOAD PARAMETER REG 1   02-IHBIN
000228 58F0 1030           00030    351+         L     15,48(0,1)           LOAD PUT ROUTINE ADDR           01-PUT
00022C 05EF                         352+         BALR  14,15                LINK TO PUT ROUTINE             01-PUT
                                    353 *                                                                   00311001
00022E D278 1000 D1FE 00000 001FE   354          MVC   0(L'PAGEHD3,R1),PAGEHD3 MOVE HEADING LINE 2 INTO BUFFER 00312001
000234 4160 0003           00003    355          LA    R6,3                PRINTED 3 LINES                  00313001
                                    356 *                                                                   00314001
                                    357 PRINTL   PUT   (R12)               REQUEST QSAM BUFFER              00315001
000238 181C                         358+PRINTL   LR    1,R12                         LOAD PARAMETER REG 1   02-IHBIN
00023A 58F0 1030           00030    359+         L     15,48(0,1)           LOAD PUT ROUTINE ADDR           01-PUT
00023E 05EF                         360+         BALR  14,15                LINK TO PUT ROUTINE             01-PUT
                                    361 *                                                                   00316001
000240 9240 1000     00000          362          MVI   0(R1),C' '                                           00317001
000244 D277 1001 1000 00001 00000   363          MVC   1(120,R1),0(R1)     BLANK BUFFER                     00318001
00024A 4110 100B           0000B    364          LA    R1,11(,R1)          MAKE A LEFT HAND MARGIN          00319001
00024E 4160 6001           00001    365          LA    R6,1(,R6)           INCR LINE COUNTER                00320001
000252 4060 D098           00098    366          STH   R6,LINCNT           SAVE UPDATED LINECNT             00321001
000256 98E0 508E           00270    367          LM    R14,R0,SAVEP+12     RESTORE ALL REGS EXCEPT R1       00322001
00025A 982C 509E           00280    368          LM    R2,R12,SAVEP+28                                      00323001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

00025E 1BFF                         369          SR    R15,R15                                                00324001
000260 07FE                         370          BR    R14                     RETURN TO CALLER               00325001
                                    371 *                                                                     00326001
000262 0000
000264 0000000000000000             372 SAVEP    DC    18F'0'                  REG SAVE AREA                  00327001
                                    373 *                                                                     00328001
0002AC 40202020                     374 PAGEPATT DC    XL4'40202020'           PAGE NUMBER ED PATTERN         00329001
                                    375 *                                                                     00330001
0002B0                              376          LTORG                                                        00331001
0002B0 F0F1F2F3F4F5F6F7             377                =C'0123456789ABCDEF'
0002C0 14D1                         378                =AL1(20,209)
0002C2 0008                         379                =H'8'
0002C4 0010                         380                =H'16'
0002C6 00015C                       381                =AL3(GOTOEND)
0002C9 1C                           382                =P'1'
                                    383 *                                                                     00332001
                                    384 *        PRINT NOGEN                                                  00333001
                                    385 *                                                                     00334001
                                    386 *        DATA CONTROL BLOCKS                                          00335001
                                    387 *                                                                     00336001
                                    388 SYSPRINT DCB   DDNAME=SYSPRINT,                                      C00337001
                                                       DSORG=PS,                                             C00338001
                                                       MACRF=(PL),                                           C00339001
                                                       RECFM=FBA,                                            C00340001
                                                       LRECL=121,                                            C00341001
                                                       SYNAD=SYNPR                                            00342001


                                    390+*                      DATA CONTROL BLOCK                             01-DCB
                                    391+*                                                                     01-DCB
0002CA 0000
0002CC                              392+SYSPRINT DC    0F'0'                   ORIGIN ON WORD BOUNDARY        01-DCB

                                    394+*                      DIRECT ACCESS DEVICE INTERFACE                 01-DCB

0002CC 0000000000000000             396+         DC    BL16'0'                  FDAD,DVTBL                    01-DCB
0002DC 00000000                     397+         DC    A(0)                     KEYLE,DEVT,TRBAL              01-DCB

                                    399+*                      COMMON ACCESS METHOD INTERFACE                 01-DCB

0002E0 00                           401+         DC    AL1(0)                  BUFNO                          01-DCB
0002E1 000001                       402+         DC    AL3(1)                  BUFCB                          01-DCB
0002E4 0000                         403+         DC    AL2(0)             BUFL                                01-DCB
0002E6 4000                         404+         DC    BL2'0100000000000000'             DSORG                01-DCB
0002E8 00000001                     405+         DC    A(1)                     IOBAD                         01-DCB

                                    407+*                      FOUNDATION EXTENSION                           01-DCB

0002EC 00                           409+         DC    BL1'00000000'                  BFTEK,BFLN,HIARCHY      01-DCB
0002ED 000001                       410+         DC    AL3(1)                  EODAD                          01-DCB
0002F0 94                           411+         DC    BL1'10010100'           RECFM                          01-DCB
0002F1 000000                       412+         DC    AL3(0)                  EXLST                          01-DCB

                                    414+*                      FOUNDATION BLOCK                               01-DCB

0002F4 E2E8E2D7D9C9D5E3             416+         DC    CL8'SYSPRINT'           DDNAME                         01-DCB
0002FC 02                           417+         DC    BL1'00000010'           OFLGS                          01-DCB
0002FD 00                           418+         DC    BL1'00000000'                          IFLG            01-DCB
0002FE 0048                         419+         DC    BL2'0000000001001000'   MACR                           01-DCB

                                    421+*                      BSAM-BPAM-QSAM INTERFACE                       01-DCB

000300 00                           423+         DC    BL1'00000000'                                     RER1 01-DCB
000301 000001                       424+         DC    AL3(1)                  CHECK, GERR, PERR              01-DCB
000304 0000018E                     425+         DC    A(SYNPR)                SYNAD                          01-DCB
000308 0000                         426+         DC    H'0'                    CIND1, CIND2                   01-DCB
00030A 0000                         427+         DC    AL2(0)                  BLKSIZE                        01-DCB
00030C 00000000                     428+         DC    F'0'                    WCPO, WCPL, OFFSR, OFFSW       01-DCB
000310 00000001                     429+         DC    A(1)                    IOBA                           01-DCB
000314 00                           430+         DC    AL1(0)                  NCP                            01-DCB
000315 000001                       431+         DC    AL3(1)                  EOBR, EOBAD                    01-DCB

                                    433+*                           QSAM INTERFACE                            01-DCB

000318 00000001                     435+         DC    A(1)                     RECAD                         01-DCB
00031C 0000                         436+         DC    H'0'                    QSWS                           01-DCB
00031E 0079                         437+         DC    AL2(121)        LRECL                                  01-DCB
000320 00                           438+         DC    BL1'00000000'           EROPT                          01-DCB
000321 000001                       439+         DC    AL3(1)                  CNTRL                          01-DCB
000324 00000000                     440+         DC    F'0'                    PRECL                          01-DCB
000328 00000001                     441+         DC    A(1)                    EOB                            01-DCB
                                    442 *                                                                     00343001
                                    443 SYSLIN   DCB   DDNAME=SYSLIN,                                        C00344001
                                                       DSORG=PS,                                             C00345001
                                                       MACRF=(PL),                                           C00346001
                                                       RECFM=FB,                                             C00347001
                                                       LRECL=80,                                             C00348001
                                                       SYNAD=SYNAD                                            00349001


                                    445+*                      DATA CONTROL BLOCK                             01-DCB
                                    446+*                                                                     01-DCB
00032C                              447+SYSLIN   DC    0F'0'                   ORIGIN ON WORD BOUNDARY        01-DCB

                                    449+*                      DIRECT ACCESS DEVICE INTERFACE                 01-DCB
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

00032C 0000000000000000            451+         DC    BL16'0'                  FDAD,DVTBL                01-DCB
00033C 00000000                    452+         DC    A(0)                     KEYLE,DEVT,TRBAL          01-DCB

                                   454+*                 COMMON ACCESS METHOD INTERFACE                  01-DCB

000340 00                          456+         DC    AL1(0)                  BUFNO                      01-DCB
000341 000001                      457+         DC    AL3(1)                  BUFCB                      01-DCB
000344 0000                        458+         DC    AL2(0)             BUFL                            01-DCB
000346 4000                        459+         DC    BL2'0100000000000000'            DSORG             01-DCB
000348 00000001                    460+         DC    A(1)                     IOBAD                     01-DCB

                                   462+*                 FOUNDATION EXTENSION                            01-DCB

00034C 00                          464+         DC    BL1'00000000'                  BFTEK,BFLN,HIARCHY  01-DCB
00034D 000001                      465+         DC    AL3(1)                  EODAD                      01-DCB
000350 90                          466+         DC    BL1'10010000'           RECFM                      01-DCB
000351 000000                      467+         DC    AL3(0)                  EXLST                      01-DCB

                                   469+*                 FOUNDATION BLOCK                                01-DCB

000354 E2E8E2D3C9D54040            471+         DC    CL8'SYSLIN'             DDNAME                     01-DCB
00035C 02                          472+         DC    BL1'00000010'           OFLGS                      01-DCB
00035D 00                          473+         DC    BL1'00000000'                          IFLG        01-DCB
00035E 0048                        474+         DC    BL2'0000000001001000'   MACR                       01-DCB

                                   476+*                 BSAM-BPAM-QSAM INTERFACE                        01-DCB

000360 00                          478+         DC    BL1'00000000'                                 RER1 01-DCB
000361 000001                      479+         DC    AL3(1)                  CHECK, GERR, PERR          01-DCB
000364 00000194                    480+         DC    A(SYNAD)                SYNAD                      01-DCB
000368 0000                        481+         DC    H'0'                    CIND1, CIND2               01-DCB
00036A 0000                        482+         DC    AL2(0)                  BLKSIZE                    01-DCB
00036C 00000000                    483+         DC    F'0'                    WCPO, WCPL, OFFSR, OFFSW   01-DCB
000370 00000001                    484+         DC    A(1)                    IOBA                       01-DCB
000374 00                          485+         DC    AL1(0)                  NCP                        01-DCB
000375 000001                      486+         DC    AL3(1)                  EOBR, EOBAD                01-DCB

                                   488+*                      QSAM INTERFACE                             01-DCB

000378 00000001                    490+         DC    A(1)                     RECAD                     01-DCB
00037C 0000                        491+         DC    H'0'                    QSWS                       01-DCB
00037E 0050                        492+         DC    AL2(80)          LRECL                             01-DCB
000380 00                          493+         DC    BL1'00000000'           EROPT                      01-DCB
000381 000001                      494+         DC    AL3(1)                  CNTRL                      01-DCB
000384 00000000                    495+         DC    F'0'                    PRECL                      01-DCB
000388 00000001                    496+         DC    A(1)                    EOB                        01-DCB
                                   497 *                                                                00350001
                                   498 SYSPUNCH DCB   DDNAME=SYSPUNCH,                                 C00351001
                                                      DSORG=PS,                                        C00352001
                                                      MACRF=(PL),                                      C00353001
                                                      RECFM=FB,                                        C00354001
                                                      LRECL=80,                                        C00355001
                                                      SYNAD=SYNAD                                       00356001


                                   500+*                 DATA CONTROL BLOCK                              01-DCB
                                   501+*                                                                 01-DCB
00038C                             502+SYSPUNCH DC    0F'0'                   ORIGIN ON WORD BOUNDARY    01-DCB

                                   504+*                 DIRECT ACCESS DEVICE INTERFACE                  01-DCB

00038C 0000000000000000            506+         DC    BL16'0'                  FDAD,DVTBL                01-DCB
00039C 00000000                    507+         DC    A(0)                     KEYLE,DEVT,TRBAL          01-DCB

                                   509+*                 COMMON ACCESS METHOD INTERFACE                  01-DCB

0003A0 00                          511+         DC    AL1(0)                  BUFNO                      01-DCB
0003A1 000001                      512+         DC    AL3(1)                  BUFCB                      01-DCB
0003A4 0000                        513+         DC    AL2(0)             BUFL                            01-DCB
0003A6 4000                        514+         DC    BL2'0100000000000000'            DSORG             01-DCB
0003A8 00000001                    515+         DC    A(1)                     IOBAD                     01-DCB

                                   517+*                 FOUNDATION EXTENSION                            01-DCB

0003AC 00                          519+         DC    BL1'00000000'                  BFTEK,BFLN,HIARCHY  01-DCB
0003AD 000001                      520+         DC    AL3(1)                  EODAD                      01-DCB
0003B0 90                          521+         DC    BL1'10010000'           RECFM                      01-DCB
0003B1 000000                      522+         DC    AL3(0)                  EXLST                      01-DCB

                                   524+*                 FOUNDATION BLOCK                                01-DCB

0003B4 E2E8E2D7E4D5C3C8            526+         DC    CL8'SYSPUNCH'           DDNAME                     01-DCB
0003BC 02                          527+         DC    BL1'00000010'           OFLGS                      01-DCB
0003BD 00                          528+         DC    BL1'00000000'                          IFLG        01-DCB
0003BE 0048                        529+         DC    BL2'0000000001001000'   MACR                       01-DCB

                                   531+*                 BSAM-BPAM-QSAM INTERFACE                        01-DCB

0003C0 00                          533+         DC    BL1'00000000'                                 RER1 01-DCB
0003C1 000001                      534+         DC    AL3(1)                  CHECK, GERR, PERR          01-DCB
0003C4 00000194                    535+         DC    A(SYNAD)                SYNAD                      01-DCB
0003C8 0000                        536+         DC    H'0'                    CIND1, CIND2               01-DCB
0003CA 0000                        537+         DC    AL2(0)                  BLKSIZE                    01-DCB
0003CC 00000000                    538+         DC    F'0'                    WCPO, WCPL, OFFSR, OFFSW   01-DCB
0003D0 00000001                    539+         DC    A(1)                    IOBA                       01-DCB
0003D4 00                          540+         DC    AL1(0)                  NCP                        01-DCB
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

0003D5 000001                       541+         DC    AL3(1)                  EOBR, EOBAD                     01-DCB

                                    543+*                            QSAM INTERFACE                            01-DCB

0003D8 00000001                     545+         DC    A(1)                     RECAD                          01-DCB
0003DC 0000                         546+         DC    H'0'                    QSWS                            01-DCB
0003DE 0050                         547+         DC    AL2(80)         LRECL                                   01-DCB
0003E0 00                           548+         DC    BL1'00000000'           EROPT                           01-DCB
0003E1 000001                       549+         DC    AL3(1)                  CNTRL                           01-DCB
0003E4 00000000                     550+         DC    F'0'                    PRECL                           01-DCB
0003E8 00000001                     551+         DC    A(1)                    EOB                             01-DCB
                                    552 *                                                                    00357001
                                    553 SYSUT2   DCB   DDNAME=SYSUT2,                                       C00358001
                                                       DSORG=PS,                                            C00359001
                                                       MACRF=(R,W),                                         C00360001
                                                       RECFM=F,                                             C00361001
                                                       SYNAD=SYNAD,                                         C00362001
                                                       EODAD=EODAD2                                          00363001


                                    555+*                       DATA CONTROL BLOCK                             01-DCB
                                    556+*                                                                      01-DCB
0003EC                              557+SYSUT2   DC    0F'0'                   ORIGIN ON WORD BOUNDARY         01-DCB

                                    559+*                       DIRECT ACCESS DEVICE INTERFACE                 01-DCB

0003EC 0000000000000000             561+         DC    BL16'0'                  FDAD,DVTBL                     01-DCB
0003FC 00000000                     562+         DC    A(0)                     KEYLE,DEVT,TRBAL               01-DCB

                                    564+*                       COMMON ACCESS METHOD INTERFACE                 01-DCB

000400 00                           566+         DC    AL1(0)                  BUFNO                           01-DCB
000401 000001                       567+         DC    AL3(1)                  BUFCB                           01-DCB
000404 0000                         568+         DC    AL2(0)              BUFL                                01-DCB
000406 4000                         569+         DC    BL2'0100000000000000'             DSORG                 01-DCB
000408 00000001                     570+         DC    A(1)                     IOBAD                          01-DCB

                                    572+*                       FOUNDATION EXTENSION                           01-DCB

00040C 00                           574+         DC    BL1'00000000'                   BFTEK,BFLN,HIARCHY      01-DCB
00040D 00017C                       575+         DC    AL3(EODAD2)             EODAD                           01-DCB
000410 80                           576+         DC    BL1'10000000'           RECFM                           01-DCB
000411 000000                       577+         DC    AL3(0)                  EXLST                           01-DCB

                                    579+*                       FOUNDATION BLOCK                               01-DCB

000414 E2E8E2E4E3F24040             581+         DC    CL8'SYSUT2'             DDNAME                          01-DCB
00041C 02                           582+         DC    BL1'00000010'           OFLGS                           01-DCB
00041D 00                           583+         DC    BL1'00000000'                          IFLG             01-DCB
00041E 2020                         584+         DC    BL2'0010000000100000'   MACR                            01-DCB

                                    586+*                       BSAM-BPAM-QSAM INTERFACE                       01-DCB

000420 00                           588+         DC    BL1'00000000'                                     RER1  01-DCB
000421 000001                       589+         DC    AL3(1)                  CHECK, GERR, PERR               01-DCB
000424 00000194                     590+         DC    A(SYNAD)                SYNAD                           01-DCB
000428 0000                         591+         DC    H'0'                    CIND1, CIND2                    01-DCB
00042A 0000                         592+         DC    AL2(0)                  BLKSIZE                         01-DCB
00042C 00000000                     593+         DC    F'0'                    WCPO, WCPL, OFFSR, OFFSW        01-DCB
000430 00000001                     594+         DC    A(1)                    IOBA                            01-DCB
000434 00                           595+         DC    AL1(0)                  NCP                             01-DCB
000435 000001                       596+         DC    AL3(1)                  EOBR, EOBAD                     01-DCB

                                    598+*                         BSAM-BPAM INTERFACE                          01-DCB

000438 00000001                     600+         DC    A(1)                    EOBW                            01-DCB
00043C 0000                         601+         DC    H'0'                    DIRCT                           01-DCB
00043E 0000                         602+         DC    AL2(0)          LRECL                                   01-DCB
000440 00000001                     603+         DC    A(1)                    CNTRL, NOTE, POINT              01-DCB
                                    604 *                                                                    00364001
                                    605 SYSUT3   DCB   DDNAME=SYSUT3,                                       C00365001
                                                       DSORG=PS,                                            C00366001
                                                       MACRF=(RP,WP),                                       C00367001
                                                       BLKSIZE=2000,                                        C00368001
                                                       RECFM=U,                                             C00369001
                                                       SYNAD=SYNAD,                                         C00370001
                                                       EODAD=EODAD3                                          00371001


                                    607+*                       DATA CONTROL BLOCK                             01-DCB
                                    608+*                                                                      01-DCB
000444                              609+SYSUT3   DC    0F'0'                   ORIGIN ON WORD BOUNDARY         01-DCB

                                    611+*                       DIRECT ACCESS DEVICE INTERFACE                 01-DCB

000444 0000000000000000             613+         DC    BL16'0'                  FDAD,DVTBL                     01-DCB
000454 00000000                     614+         DC    A(0)                     KEYLE,DEVT,TRBAL               01-DCB

                                    616+*                       COMMON ACCESS METHOD INTERFACE                 01-DCB

000458 00                           618+         DC    AL1(0)                  BUFNO                           01-DCB
000459 000001                       619+         DC    AL3(1)                  BUFCB                           01-DCB
00045C 0000                         620+         DC    AL2(0)              BUFL                                01-DCB
00045E 4000                         621+         DC    BL2'0100000000000000'             DSORG                 01-DCB
000460 00000001                     622+         DC    A(1)                     IOBAD                          01-DCB
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12
                                    624+*                   FOUNDATION EXTENSION                           01-DCB

000464 00                           626+         DC    BL1'00000000'              BFTEK,BFLN,HIARCHY       01-DCB
000465 000182                       627+         DC    AL3(EODAD3)             EODAD                       01-DCB
000468 C0                           628+         DC    BL1'11000000'           RECFM                       01-DCB
000469 000000                       629+         DC    AL3(0)                  EXLST                       01-DCB

                                    631+*                   FOUNDATION BLOCK                               01-DCB

00046C E2E8E2E4E3F34040             633+         DC    CL8'SYSUT3'             DDNAME                      01-DCB
000474 02                           634+         DC    BL1'00000010'           OFLGS                       01-DCB
000475 00                           635+         DC    BL1'00000000'                          IFLG         01-DCB
000476 2424                         636+         DC    BL2'0010010000100100'   MACR                        01-DCB

                                    638+*                   BSAM-BPAM-QSAM INTERFACE                       01-DCB

000478 00                           640+         DC    BL1'00000000'                                  RER1 01-DCB
000479 000001                       641+         DC    AL3(1)                  CHECK, GERR, PERR           01-DCB
00047C 00000194                     642+         DC    A(SYNAD)                SYNAD                       01-DCB
000480 0000                         643+         DC    H'0'                    CIND1, CIND2                01-DCB
000482 07D0                         644+         DC    AL2(2000)               BLKSIZE                     01-DCB
000484 00000000                     645+         DC    F'0'                    WCPO, WCPL, OFFSR, OFFSW    01-DCB
000488 00000001                     646+         DC    A(1)                    IOBA                        01-DCB
00048C 00                           647+         DC    AL1(0)                  NCP                         01-DCB
00048D 000001                       648+         DC    AL3(1)                  EOBR, EOBAD                 01-DCB

                                    650+*                     BSAM-BPAM INTERFACE                          01-DCB

000490 00000001                     652+         DC    A(1)                    EOBW                        01-DCB
000494 0000                         653+         DC    H'0'                    DIRCT                       01-DCB
000496 0000                         654+         DC    AL2(0)         LRECL                                01-DCB
000498 00000001                     655+         DC    A(1)                    CNTRL, NOTE, POINT          01-DCB
                                    656 *                                                                  00372001
                                    657 *                                                                  00373001
                                    658 *        PRINT GEN                                                 00374001
                                    659 *                                                                  00375001
                      002CC         660 IEX00PRT EQU   SYSPRINT                                            00376001
                      0032C         661 IEX00LIN EQU   SYSLIN                                              00377001
                      0038C         662 IEX00PCH EQU   SYSPUNCH                                            00378001
                      003EC         663 IEX00UT2 EQU   SYSUT2                                              00379001
                      00444         664 IEX00UT3 EQU   SYSUT3                                              00380001
                                    665 *                                                                  00381001
000000                00000 00CB6   666 WORKAREA DSECT                                                     00382001
                                    667 *                                                                  00383001
                                    668          COPY  WORKAREA                                            00384001
                                    669=*                                                                  00001001
                                    670=*        WORKAREA - MAPPING CSECT IEX00001                         00002001
                                    671=*                                                                  00003001
                                    672=*        ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT 00004001
                                    673=*                                                                  00005001
000000 0000000000000000             674=SAVEAREA DC    18F'0'                                              00006001
                                    675=*                                                                  00007001
                                    676=*        DCB ADDRS                                                 00008001
                                    677=*                                                                  00009001
000048                              678=DCBTABLE DC    0F'0'                                               00010001
000048 00000000                     679=ALINDCB  DC    A(0)                                                00011001
00004C 00000000                     680=         DC    A(0)                                                00012001
000050 00000000                     681=         DC    A(0)                                                00013001
000054 00000000                     682=         DC    A(0)                                                00014001
000058 00000000                     683=ASYSDCB  DC    A(0)                                                00015001
00005C 00000000                     684=APRTDCB  DC    A(0)                                                00016001
000060 00000000                     685=APCHDCB  DC    A(0)                                                00017001
000064 00000000                     686=AUT1DCB  DC    A(0)                                                00018001
000068 00000000                     687=AUT2DCB  DC    A(0)                                                00019001
00006C 00000000                     688=AUT3DCB  DC    A(0)                                                00020001
                                    689=*                                                                  00021001
                                    690=*        END OF DATA EXIT ADDRS                                    00022001
                                    691=*                                                                  00023001
000070 00000000                     692=EODUT1   DC    A(0)                    SYSUT1                      00024001
000074 00000000                     693=EODUT2   DC    A(0)                    SYSUT2                      00025001
000078 00000000                     694=EODUT3   DC    A(0)                    SYSUT3                      00026001
00007C 00000000                     695=EODIN    DC    A(0)                    SYSIN                       00027001
                                    696=*                                                                  00028001
                                    697=*        OPTION SWITCHES IN COMPFLGS                               00029001
                                    698=*                                                                  00030001
                                    699=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -             00031001
                                    700=*                                                                  00032001
                                    701=*        PURPOSE                   POSITION                        00033001
                                    702=*                                  BYTE 1    BYTE 2    BYTE 3      00034001
                                    703=*                                  01234567  01234567  01234567    00035001
                                    704=*                                                                  00036001
                                    705=*        COMPMODE (SYNTAX CHECK)   X                               00037001
                                    706=*        SUBSCRIPT OPTIMIZATION     X                              00038001
                                    707=*        WARNING ERROR               X                             00039001
                                    708=*        SERIOUS ERROR                X                            00040001
                                    709=*        TERMINATING ERROR             X                           00041001
                                    710=*        PROCEDURE/PROGRAM              X                          00042001
                                    711=*        LONG/SHORT PRECISION            X                         00043001
                                    712=*        OPERAND                          X                        00044001
                                    713=*                                                                  00045001
                                    714=*        NOSOURCE/SOURCE                     X                     00046001
                                    715=*        NOLOAD/LOAD                          X                    00047001
                                    716=*        NODECK/DECK                           X                   00048001
                                    717=*        ISO/EBCDIC                             X                  00049001
                                    718=*        PROGRAM INTERRUPT                       X                 00050001
                                    719=*        TERMINATING PHASE ENTERED                X                00051001
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  Active USINGs: IEX00000+X'1E2',R5  WORKAREA,R13  IEX00000+X'54',R14

D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                    720=*        NO BUFFERS ASSIGNED                        X             00052001
                                    721=*        NO COMPILATION POSSIBLE                     X            00053001
                                    722=*                                                                 00054001
                                    723=*        SYSPRINT DOWN                                   X        00055001
                                    724=*        WHOLE SOURCE PROG IN CORE                        X       00056001
                                    725=*        NO OPTAB                                          X      00057001
                                    726=*        SYSPRINT NOT OPENED                                X     00058001
                                    727=*        ERROR UNRELATED TO SEMICOLON NR                     X    00059001
                                    728=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)       X   00060001
                                    729=*        60 CHARACTER SET                                      X  00061001
                                    730=*        (RESERVED)                                             X 00062001
                                    731=*                                                                 00063001
000080 00220000                     732=COMPFLGS DC    X'00220000'             PARAMETERS AND SWITCHES    00064001
                                    733=*                                                                 00065001
                                    734=*        OPTION SWITCHES IN COMPFLGS                              00066001
                                    735=*                                                                 00067001
                      00080         736=COMPMODE EQU   X'80'                   SYNTAX CHECK MODE          00068001
                      00040         737=SUBSCOPT EQU   X'40'                   SUBSCRIPT OPTIMIZATION     00069001
                      000FB         738=PGR      EQU   X'FB'                                              00070001
                      00004         739=PROC     EQU   X'04'                   PRECOMPILED PROCEDURE      00071001
                                    740=*                                                                 00072001
                      000FD         741=SHRT     EQU   X'FD'                                              00073001
                      00002         742=LNG      EQU   X'02'                                              00074001
                      00001         743=OPERAND  EQU   X'01'                                              00075001
                                    744=*                                                                 00076001
                                    745=*        ERROR SEVERITY INDICATORS IN COMPFLGS                    00077001
                                    746=*                                                                 00078001
                      00020         747=WERR     EQU   X'20'                   WARNING ERROR              00079001
                      00010         748=SERR     EQU   X'10'                   SERIOUS ERROR              00080001
                      00008         749=TERR     EQU   X'08'                   TERMINATING ERROR          00081001
                                    750=*                                                                 00082001
                                    751=*        OPTION SWITCHES IN COMPFLGS+1                            00083001
                                    752=*                                                                 00084001
                      0007F         753=SRCE     EQU   X'7F'                                              00085001
                      00080         754=NSRCE    EQU   X'80'                                              00086001
                                    755=*                                                                 00087001
                      000BF         756=LOAD     EQU   X'BF'                                              00088001
                      00040         757=NLOAD    EQU   X'40'                                              00089001
                                    758=*                                                                 00090001
                      000DF         759=DECK     EQU   X'DF'                                              00091001
                      00020         760=NDECK    EQU   X'20'                                              00092001
                                    761=*                                                                 00093001
                      000EF         762=EBCDIC   EQU   X'EF'                                              00094001
                      00010         763=ISO      EQU   X'10'                                              00095001
                                    764=*                                                                 00096001
                                    765=*        TERMINATION SWITCHES IN COMPFLGS+1                       00097001
                                    766=*                                                                 00098001
                      00008         767=ERR      EQU   X'08'                   PROGRAM INTERRUPT HAS      00099001
                                    768=*                                      OCCURED IN COMPILER        00100001
                      00004         769=TERM     EQU   X'04'                   LAST PHASE HAS BEEN ENTERED 00101001
                      00002         770=NOBUF    EQU   X'02'                   ERROR POOL IS IN WORKAREA  00102001
                                    771=*                                      NO SCE PROG BUFF 1         00103001
                      00001         772=NOGO     EQU   X'01'                   COMPILATION NOT POSSIBLE   00104001
                                    773=*                                      DO NOT START SCAN 1        00105001
                      00003         774=NOBUNOGO EQU   X'03'                   NOBUF AND NOGO             00106001
                                    775=*                                                                 00107001
                                    776=*        SWITCHES IN COMPFLGS+2                                   00108001
                                    777=*                                                                 00109001
                      00080         778=PRT      EQU   X'80'                   SYSPRINT NOT AVAILABLE     00110001
                      00040         779=SPIC     EQU   X'40'                   SOURCE PROGRAM IN STORAGE  00111001
                      00020         780=NOPT     EQU   X'20'                   NO SUBSCRIPT OPTIMIZATION  00112001
                      00010         781=PRTNO    EQU   X'10'                   SYSPRINT NOT OPENED        00113001
                      00008         782=NOSC     EQU   X'08'                   SEMICOLON COUNTER NOT VALID 00114001
                                    783=*                                                                 00115001
                      00004         784=NOTEST   EQU   X'04'                                              00116001
                      000FB         785=TEST     EQU   X'FB'                   EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                    786=*                                                                 00118001
                      00002         787=SET60    EQU   X'02'                   60 CHARACTER SET IS TO BE USED 00119001
                                    788=*                                                                 00120001
                                    789=*        MISCELLANEOUS CONTROL INFORMATION                        00121001
                                    790=*                                                                 00122001
000084 0000B000                     791=SIZE     DC    F'45056'            AVAILABLE MAIN STORAGE - NOT USED 00123001
000088 00000000                     792=PICAADD  DC    A(0)                ADDR OF PICA OF THE INVOKER    00124001
00008C 00000000                     793=HDING    DC    F'0'                ADDR OF HEADING INFO OF THE INVOKER 00125001
000090 00000000                     794=ERET     DC    F'0'                RETURN ADDR FOR PROGRAM        00126001
                                    795=*                                  AND I/O ERRORS                 00127001
000094 0000000C                     796=PAGECNT  DC    PL4'0'              PAGE COUNT                     00128001
000098 0000                         797=LINCNT   DC    H'0'                COUNTER OF LINES PER PAGE      00129001
00009A 0038                         798=MAXLINES DC    H'56'               MAX NUMBER OF PRINT LINES PER PAGE 00130001
00009C 0000                         799=SEMCNT   DC    H'0'                SEMICOLON COUNTER              00131001
00009E 0032                         800=PBN      DC    H'50'               HIGHEST PROGRAM BLOCK NUMBER   00132001
0000A0 0000                         801=KBN      DC    H'0'                HIGHEST CONSTANT POOL NUMBER   00133001
                      0001C         802=LATNR    EQU   28                  NR OF LIBRARY STAND FUNCTIONS  00134001
                      0006C         803=LATBEG   EQU   4*(LATNR-1)                                        00135001
0000A2 006C                         804=LN       DC    AL2(LATBEG)         LAST USED DISPLACEMENT IN LAT  00136001
0000A4 00000000                     805=PRPT     DC    F'0'                PROGRAM POINTER                00137001
0000A8 00000000                     806=SAVOUTA  DC    F'0'                                               00138001
0000AC                              807=OUTAREA2 DS    F                   SYSPUNCH SAVE AREA             00139001
0000B0 40404040                     808=PIDENT   DC    CL4' '              PROGRAM IDENTIFICATION         00140001
0000B4 0000000C                     809=CARDCNT  DC    PL4'0'              OBJECT PROGRAM DECK SEQUENCE NUMBER 00141001
0000B8 00000000                     810=PRTRTADD DC    A(0)                ADDR OF PRINT ROUTINE          00142001
                                    811=*                                                                 00143001
                                    812=*        ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE 00144001
                                    813=*                                                                 00145001
0000BC 00000278                     814=ERRPOOL  DC    A(PRELPOOL)         FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                     815=NEXTERR  DC    A(PRELPOOL)         NEXT FREE PLACE IN ERROR POOL  00147001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.12

0000C4                               816=ENDPOOL  DS    F                    LAST BYTE OF ERROR POOL-23           00148001
0000C8                               817=SRCE1ADD DS    F                    SOURCE PROGRAM BUFFER 1              00149001
0000CC                               818=SRCE1END DS    F                    ADDR OF LAST BYTE+1                  00150001
0000D0                               819=SULTSTRT DS    F                    ID OF LAST ITAB RECORD               00151001
                                     820=*                                                                        00152001
                                     821=*                                                                        00153001
                                     822=*        TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                     00154001
                                     823=*                                                                        00155001
0000D4                               824=INBLKS   DS    H                    MAX BLKSIZE FOR SYSIN     - NOT USED 00156001
0000D6                               825=PRTBLKS  DS    H                    MAX BLKSIZE SYSPRINT      - NOT USED 00157001
0000D8                               826=LINBLKS  DS    H                    MAX BLKSIZE FOR SYSLIN    - NOT USED 00158001
0000DA                               827=PCHBLKS  DS    H                    MAX BLKSIZE FOR SYSPUNCH - NOT USED  00159001
0000DC                               828=POOLS    DS    F                    SIZE OF ERROR POOL                   00160001
0000E0                               829=SRCE1S   DS    F                    SIZE OF SOURCE PROG BUFFERS 1 AND 2  00161001
                      000E0          830=SRCE3S   EQU   SRCE1S               SIZE OF SOURCE PROG BUFFERS 3 AND 4  00162001
0000E4                               831=ITAB10S  DS    F                    SIZE OF ITAB FOR PHASE 10            00163001
0000E8                               832=ITAB20S  DS    F                    SIZE OF ITAB FOR PHASE 20            00164001
0000EC                               833=ITAB30S  DS    F                    SIZE OF ITAB FOR PHASE 30            00165001
0000F0                               834=CRIDTABS DS    F                    SIZE OF CRIDTAB FOR PHASE 30         00166001
0000F4                               835=SUTAB30S DS    F                    SIZE OF SUTAB BUFFER OF PHASE 30     00167001
0000F8                               836=LVTAB30S DS    F                    SIZE OF LVTAB BUFFER FOR PHASE 30    00168001
0000FC                               837=OPTABS   DS    F                    SIZE OF OPTAB BUFFERS 1 AND 2        00169001
000100                               838=SUTAB40S DS    F                    SIZE OF SUTAB IN PHASE 40            00170001
000104                               839=LVTAB40S DS    F                    SIZE OF LVTAB IN PHASE 40            00171001
000108                               840=OOSTACKS DS    F                    SIZE OF OPERATOR/OPERAND STACK       00172001
                                     841=*                                                                        00173001
                                     842=*        AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF            00174001
                                     843=*        EACH NEW PAGE                                                   00175001
                                     844=*                                                                        00176001
                      0010C          845=PAGEHEAD EQU   *                                                         00177001
00010C 4040404040404040              846=PAGEHD1  DC    CL121' '                  FIRST HEADLINE                  00178001
000185                00185 0010C    847=         ORG   PAGEHD1                                                   00179001
00010C F1                            848=PAGEHD1C DC    C'1'                      ASA CNTL                        00180001
00010D 4040404040404040              849=         DC    CL10' '                   SPACER                          00181001
000117 4040404040404040              850=PAGEHD1D DC    CL100' '                  PAGE TEXT HEADING               00182001
00017B                0017B 0017D    851=         ORG   PAGEHD1+113                                               00183001
00017D D7C1C7C5                      852=PAGEHD1P DC    CL4'PAGE'                 PAGE                            00184001
000181 40404040                      853=PAGENUMB DC    CL4' '                    PAGE COUNTER                    00185001
000185                00185 00185    854=         ORG                                                             00186001
                                     855=*                                                                        00187001
000185 4040404040404040              856=PAGEHD2  DC    CL121' '                  SECOND HEADLINE                 00188001
0001FE                001FE 00185    857=         ORG   PAGEHD2                                                   00189001
000185 40                            858=PAGEHD2C DC    C' '                      ASA CNTL                        00190001
000186 4040404040404040              859=         DC    CL10' '                   SPACER                          00191001
000190 4040404040404040              860=PAGEHD2D DC    CL100' '                  PAGE TEXT HEADING               00192001
0001F4                001F4 001FE    861=         ORG                                                             00193001
                                     862=*                                                                        00194001
0001FE 4040404040404040              863=PAGEHD3  DC    CL121' '                  THIRD HEADLINE                  00195001
000277                00277 001FE    864=         ORG   PAGEHD3                                                   00196001
0001FE 40                            865=PAGEHD3C DC    C' '                      ASA CNTL                        00197001
0001FF 4040404040404040              866=         DC    CL10' '                   SPACER                          00198001
000209 4040404040404040              867=PAGEHD3D DC    CL100' '                  PAGE TEXT HEADING               00199001
00026D                0026D 00277    868=         ORG                                                             00200001
                                     869=*                                                                        00201001
                                     870=*                                                                        00202001
                                     871=*        END OF STANDARD COMMON AREA                                     00203001
                                     872=*                                                                        00204001
                      00277          873=STANDX   EQU   *                                                         00205001
                                     874=*                                                                        00206001
                                     875=*        THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL              00207001
                                     876=*        PHASES AND PARTLY OVERLAY EACH OTHER                            00208001
                                     877=*                                                                        00209001
                                     878=*                          NAME OR PURPOSE          NEEDED BY PHASES 00210001
                                     879=*                                                                        00211001
000277 00
000278                               880=         DC    0F'0'                                                     00212001
000278 4040404040404040              881=PRELPOOL DC    236C' ',20C'X' PRELIMINARY ERROR POOL     IEX10           00213001
000378                00378 00416    882=         ORG   PRELPOOL+414                                              00214001
                                     883=*                          DCB FOR SYSIN                11               00215001
                                     884=SYSIN    DCB   DDNAME=SYSIN,                                            X00216001
                                        =               DSORG=PS,                                                X00217001
                                        =               MACRF=(GM),                                              X00218001
                                        =               RECFM=FB,                                                X00219001
                                        =               LRECL=80,                                                X00220001
                                        =               BFTEK=S                                                   00221001


                                     886+*                       DATA CONTROL BLOCK                             01-DCB
                                     887+*                                                                      01-DCB
000416 0000
000418                               888+SYSIN    DC    0F'0'                   ORIGIN ON WORD BOUNDARY         01-DCB

                                     890+*                       DIRECT ACCESS DEVICE INTERFACE                 01-DCB

000418 0000000000000000              892+         DC    BL16'0'                   FDAD,DVTBL                    01-DCB
000428 00000000                      893+         DC    A(0)                      KEYLE,DEVT,TRBAL              01-DCB

                                     895+*                       COMMON ACCESS METHOD INTERFACE                 01-DCB

00042C 00                            897+         DC    AL1(0)                   BUFNO                          01-DCB
00042D 000001                        898+         DC    AL3(1)                   BUFCB                          01-DCB
000430 0000                          899+         DC    AL2(0)              BUFL                                01-DCB
000432 4000                          900+         DC    BL2'0100000000000000'              DSORG                01-DCB
000434 00000001                      901+         DC    A(1)                      IOBAD                         01-DCB

                                     903+*                       FOUNDATION EXTENSION                           01-DCB
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

000438 40                           905+          DC    BL1'01000000'               BFTEK,BFLN,HIARCHY        01-DCB
000439 000001                       906+          DC    AL3(1)               EODAD                            01-DCB
00043C 90                           907+          DC    BL1'10010000'        RECFM                            01-DCB
00043D 000000                       908+          DC    AL3(0)               EXLST                            01-DCB

                                    910+*                       FOUNDATION BLOCK                              01-DCB

000440 E2E8E2C9D5404040             912+          DC    CL8'SYSIN'           DDNAME                           01-DCB
000448 02                           913+          DC    BL1'00000010'        OFLGS                            01-DCB
000449 00                           914+          DC    BL1'00000000'                      IFLG               01-DCB
00044A 5000                         915+          DC    BL2'0101000000000000'    MACR                         01-DCB

                                    917+*                       BSAM-BPAM-QSAM INTERFACE                      01-DCB

00044C 00                           919+          DC    BL1'00000000'                                   RER1  01-DCB
00044D 000001                       920+          DC    AL3(1)               CHECK, GERR, PERR                01-DCB
000450 00000001                     921+          DC    A(1)                 SYNAD                            01-DCB
000454 0000                         922+          DC    H'0'                 CIND1, CIND2                     01-DCB
000456 0000                         923+          DC    AL2(0)               BLKSIZE                          01-DCB
000458 00000000                     924+          DC    F'0'                 WCPO, WCPL, OFFSR, OFFSW         01-DCB
00045C 00000001                     925+          DC    A(1)                 IOBA                             01-DCB
000460 00                           926+          DC    AL1(0)               NCP                              01-DCB
000461 000001                       927+          DC    AL3(1)               EOBR, EOBAD                      01-DCB

                                    929+*                            QSAM INTERFACE                           01-DCB

000464 00000001                     931+          DC    A(1)                  RECAD                           01-DCB
000468 0000                         932+          DC    H'0'                 QSWS                             01-DCB
00046A 0050                         933+          DC    AL2(80)        LRECL                                  01-DCB
00046C 00                           934+          DC    BL1'00000000'        EROPT                            01-DCB
00046D 000001                       935+          DC    AL3(1)               CNTRL                            01-DCB
000470 00000000                     936+          DC    F'0'                 PRECL                            01-DCB
000474 00000001                     937+          DC    A(1)                 EOB                              01-DCB
                                    938=*               SYNAD=SYNAD    (ASSEMBLED IN IEX00001)               00222001
                                    939=*               EODAD=EODADIN  (INSERTED BY IEX11)                   00223001
000478                 00478 00278  940=          ORG   PRELPOOL                                             00224001
000278                              941=PBTAB2    DS    CL510          PROGR. BLOCK TABLE 2          20-50   00225001
000478                              942=          DS    0F                                                   00226001
000478                              943=PBTAB1    DS    CL255          PROGR. BLOCK TABLE 1          11-20   00227001
000577                 00577 00478  944=          ORG   PBTAB1                                               00228001
000478                              945=FSTAB     DS    CL255          FOR STATEMENT TABLE           30-40   00229001
                                    946=*                              DCB FOR SYSUT1                11-30   00230001
                                    947=SYSUT1    DCB   DDNAME=SYSUT1,                                      X00231001
                                        =               DSORG=PS,                                           X00232001
                                        =               MACRF=(R,W),                                        X00233001
                                        =               RECFM=F                                              00234001


                                    949+*                       DATA CONTROL BLOCK                            01-DCB
                                    950+*                                                                     01-DCB
000577 00
000578                              951+SYSUT1    DC    0F'0'                ORIGIN ON WORD BOUNDARY          01-DCB

                                    953+*                       DIRECT ACCESS DEVICE INTERFACE                01-DCB

000578 0000000000000000             955+          DC    BL16'0'               FDAD,DVTBL                      01-DCB
000588 00000000                     956+          DC    A(0)                  KEYLE,DEVT,TRBAL                01-DCB

                                    958+*                       COMMON ACCESS METHOD INTERFACE                01-DCB

00058C 00                           960+          DC    AL1(0)               BUFNO                            01-DCB
00058D 000001                       961+          DC    AL3(1)               BUFCB                            01-DCB
000590 0000                         962+          DC    AL2(0)           BUFL                                 01-DCB
000592 4000                         963+          DC    BL2'0100000000000000'          DSORG                  01-DCB
000594 00000001                     964+          DC    A(1)                  IOBAD                           01-DCB

                                    966+*                       FOUNDATION EXTENSION                          01-DCB

000598 00                           968+          DC    BL1'00000000'               BFTEK,BFLN,HIARCHY        01-DCB
000599 000001                       969+          DC    AL3(1)               EODAD                            01-DCB
00059C 80                           970+          DC    BL1'10000000'        RECFM                            01-DCB
00059D 000000                       971+          DC    AL3(0)               EXLST                            01-DCB

                                    973+*                       FOUNDATION BLOCK                              01-DCB

0005A0 E2E8E2E4E3F14040             975+          DC    CL8'SYSUT1'          DDNAME                           01-DCB
0005A8 02                           976+          DC    BL1'00000010'        OFLGS                            01-DCB
0005A9 00                           977+          DC    BL1'00000000'                      IFLG               01-DCB
0005AA 2020                         978+          DC    BL2'0010000000100000'    MACR                         01-DCB

                                    980+*                       BSAM-BPAM-QSAM INTERFACE                      01-DCB

0005AC 00                           982+          DC    BL1'00000000'                                   RER1  01-DCB
0005AD 000001                       983+          DC    AL3(1)               CHECK, GERR, PERR                01-DCB
0005B0 00000001                     984+          DC    A(1)                 SYNAD                            01-DCB
0005B4 0000                         985+          DC    H'0'                 CIND1, CIND2                     01-DCB
0005B6 0000                         986+          DC    AL2(0)               BLKSIZE                          01-DCB
0005B8 00000000                     987+          DC    F'0'                 WCPO, WCPL, OFFSR, OFFSW         01-DCB
0005BC 00000001                     988+          DC    A(1)                 IOBA                             01-DCB
0005C0 00                           989+          DC    AL1(0)               NCP                              01-DCB
0005C1 000001                       990+          DC    AL3(1)               EOBR, EOBAD                      01-DCB

                                    992+*                         BSAM-BPAM INTERFACE                         01-DCB

0005C4 00000001                     994+          DC    A(1)                 EOBW                             01-DCB
0005C8 0000                         995+          DC    H'0'                 DIRCT                            01-DCB
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  Active USINGs: IEX00000+X'1E2',R5  WORKAREA,R13  IEX00000+X'54',R14

D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

0005CA 0000                         996+        DC    AL2(0)         LRECL                                01-DCB
0005CC 00000001                     997+        DC    A(1)                    CNTRL, NOTE, POINT          01-DCB
                                    998=*             SYNAD=SYNAD,   (ASSEMBLED IN IEX00001)              00235001
                                    999=*             EODAD=EODAD1                                        00236001
                                   1000=*                                                                 00237001
0005D0                             1001=        DS    0F                                                  00238001
0005D0                             1002=SPTAB   DS    CL255          SCOPE TABLE            11-30         00239001
0006D0                             1003=        DS    0F                                                  00240001
                      006CD        1004=GPTAB   EQU   *-3            GROUP TABLE            11-30         00241001
0006D0                             1005=        DS    CL1510                                              00242001
                                   1006=*                                                                 00243001
                                   1007=*       END OF SYMLIB PART OF COMMON WORK AREA                    00244001
                                   1008=*                                                                 00245001
                                   1009 *                                                                 00385001
                                   1010 *       DUMMY CONTROL SECTION TO PROVIDE ADDRESSABILITY OF DCB    00386001
                                   1011 *                                                                 00387001
                                   1012         PRINT NOGEN                                               00388001
                                   1013 *                                                                 00389001
                                   1014         DCBD  DSORG=(PS),DEVD=(DA)                                00390001
                                   1572 *                                                                 00391001
                                   1573         PRINT GEN                                                 00392001
                                   1574 *                                                                 00393001
                                   1575 *       REGISTER AND BIT EQUATES                                  00394001
                                   1576 *                                                                 00395001
                                   1577         IEZREGS                                                   00396001
                      00000        1578+R0      EQU   0                                                   01-IEZRE
                      00001        1579+R1      EQU   1                                                   01-IEZRE
                      00002        1580+R2      EQU   2                                                   01-IEZRE
                      00003        1581+R3      EQU   3                                                   01-IEZRE
                      00004        1582+R4      EQU   4                                                   01-IEZRE
                      00005        1583+R5      EQU   5                                                   01-IEZRE
                      00006        1584+R6      EQU   6                                                   01-IEZRE
                      00007        1585+R7      EQU   7                                                   01-IEZRE
                      00008        1586+R8      EQU   8                                                   01-IEZRE
                      00009        1587+R9      EQU   9                                                   01-IEZRE
                      0000A        1588+R10     EQU   10                                                  01-IEZRE
                      0000B        1589+R11     EQU   11                                                  01-IEZRE
                      0000C        1590+R12     EQU   12                                                  01-IEZRE
                      0000D        1591+R13     EQU   13                                                  01-IEZRE
                      0000E        1592+R14     EQU   14                                                  01-IEZRE
                      0000F        1593+R15     EQU   15                                                  01-IEZRE
                                   1594 *                                                                 00397001
                                   1595         IEZBITS                                                   00398001


                      00080        1597+BIT0    EQU   128                                                 01-IEZBI
                      00040        1598+BIT1    EQU   64                                                  01-IEZBI
                      00020        1599+BIT2    EQU   32                                                  01-IEZBI
                      00010        1600+BIT3    EQU   16                                                  01-IEZBI
                      00008        1601+BIT4    EQU   8                                                   01-IEZBI
                      00004        1602+BIT5    EQU   4                                                   01-IEZBI
                      00002        1603+BIT6    EQU   2                                                   01-IEZBI
                      00001        1604+BIT7    EQU   1                                                   01-IEZBI


                                   1606 *                                                                 00399001
                                   1607         END                                                       00400001
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Symbol    Length    Value     Id    Type Asm  Program   Defn  References                  X390 3.1.04  2012/08/17 13.12

=AL1(20,209)
               1 000002C0 00000001  R A                 378   191
=AL3(GOTOEND)
               3 000002C6 00000001  R A                 381   224
=C'0123456789ABCDEF'
              16 000002B0 00000001  C C                 377   211
=H'16'         2 000002C4 00000001  H H                 380   209
=H'8'          2 000002C2 00000001  H H                 379   202
=P'1'          1 000002C9 00000001  P P                 382   331
=V(IEX00001)
               4 000000B0 00000001  V V                 162   129
APRTDCB        4 0000005C FFFFFFFF  A A                 684   324
COMPFLGS       4 00000080 FFFFFFFF  X X                 732   184   187   193   214M  217M  262M  291M  292
DCBBIT0        1 00000080           U                  1036  1122  1130  1142  1165  1192  1194  1195  1197  1220  1223
                                                             1243  1247  1262  1299  1354  1385  1424  1428  1441  1541
                                                             1543  1553
DCBBIT1        1 00000040           U                  1037  1123  1131  1144  1166  1167  1176  1192  1194  1196  1197
                                                             1225  1243  1245  1247  1265  1266  1267  1302  1303  1354
                                                             1387  1430  1432  1444  1488  1541  1545  1554
DCBBIT2        1 00000020           U                  1038  1124  1132  1145  1146  1147  1166  1167  1171  1177  1192
                                                             1193  1198  1227  1248  1249  1270  1271  1272  1306  1307
                                                             1355  1392  1433  1449  1491  1494  1541  1555
DCBBIT3        1 00000010           U                  1039  1125  1145  1147  1148  1166  1179  1199  1230  1248  1251
                                                             1274  1275  1276  1310  1311  1355  1394  1397  1399  1435
                                                             1450  1491  1495  1541
DCBBIT4        1 00000008           U                  1040  1133  1180  1200  1231  1253  1258  1259  1279  1280  1314
                                                             1315  1317  1318  1356  1402  1451  1491  1496
DCBBIT5        1 00000004           U                  1041  1134  1181  1203  1204  1233  1253  1255  1256  1259  1283
                                                             1285  1286  1287  1321  1322  1323  1324  1356  1404  1407
                                                             1437  1453  1486
DCBBIT6        1 00000002           U                  1042  1126  1182  1183  1186  1203  1205  1234  1290  1291  1292
                                                             1293  1327  1328  1329  1330  1357  1410  1455  1497
DCBBIT7        1 00000001           U                  1043  1127  1182  1184  1186  1207  1238  1295  1296  1333  1334
                                                             1336  1337  1413  1439  1456  1499
DCBDDNAM       8 00000028 FFFFFFFE  C C                1217   287
DCBFDAD        8 00000005 FFFFFFFE  C C                1063  1066
EODAD2         4 0000017C 00000001  I                   249   575
EODAD3         4 00000182 00000001  I                   252   627
EODIN          4 0000007C FFFFFFFF  A A                 695   256
EODUT1         4 00000070 FFFFFFFF  A A                 692   246
EODUT2         4 00000074 FFFFFFFF  A A                 693   249
EODUT3         4 00000078 FFFFFFFF  A A                 694   252
ERET           4 00000090 FFFFFFFF  F F                 794   216   295
ERR            1 00000008           U                   767   187   214
ERRERR         6 00000154 00000001  I                   224   188B
GOTOEND        2 0000015C 00000001  I                   230   381
IEX00EDI       1 00000188 00000001  U                   255   114
IEX00ED1       1 00000176 00000001  U                   245   114
IEX00LIN       4 0000032C 00000001  U                   661   113
IEX00PCH       4 0000038C 00000001  U                   662   113
IEX00PIC       1 000000B4 00000001  B B                 177   114
IEX00PRI       4 000001E2 00000001  I                   320   114   319U  323U
IEX00PRT       4 000002CC 00000001  U                   660   113
IEX00SYN       1 00000194 00000001  U                   269   114
IEX00UT2       4 000003EC 00000001  U                   663   113
IEX00UT3       4 00000444 00000001  U                   664   113
IEX00000       1 00000000 00000001  J                   104   116U
IEX00001       1 00000000 00000002  T                   162   162
IHADCB         1 00000000 FFFFFFFE  J                  1019   286U 1104  1151  1216  1345  1360  1367  1380  1476  1482
                                                             1509  1532
LATBEG         1 0000006C           U                   803   804
LATNR          1 0000001C           U                   802   803
LINCNT         2 00000098 FFFFFFFF  H H                 797   325   366M
LOOP           2 000000F0 00000001  I                   198   203B
LOOP2          2 0000010A 00000001  I                   205   210B
MAXLINES       2 0000009A FFFFFFFF  H H                 798   326
NEXTERR        4 000000C0 FFFFFFFF  A A                 815   190   213M  283   290M
NOSC           1 00000008           U                   782   193
PAGECNT        4 00000094 FFFFFFFF  P P                 796   331M  333
PAGEHD1      121 0000010C FFFFFFFF  C C                 846   340   847   851
PAGEHD2      121 00000185 FFFFFFFF  C C                 856   347   857
PAGEHD3      121 000001FE FFFFFFFF  C C                 863   354   864
PAGENUMB       4 00000181 FFFFFFFF  C C                 853   332M  333M
PAGEPATT       4 000002AC 00000001  X X                 374   332
PBTAB1       255 00000478 FFFFFFFF  C C                 943   944
PIROUT         4 000000BA 00000001  I                   184   178
PISAVE         4 00000144 00000001  F F                 222   189M  215
PRELPOOL       1 00000278 FFFFFFFF  C C                 881   814   815   882   940
PRINTL         2 00000238 00000001  I                   358   327B
PRT            1 00000080           U                   778   262   292
PTTRN210       1 000001E0 00000001  R A                 298   284
R0             1 00000000           U                  1578   129M  367M
R1             1 00000001           U                  1579   197   204   216   224   270   340   347   354   362   363
                                                             364M
R12            1 0000000C           U                  1590   320   324M  336   343   350   358   368M
R13            1 0000000D           U                  1591   126   127   128M  150M  171U
R14            1 0000000E           U                  1592   148M  149U  294M  320   367M  370B
R15            1 0000000F           U                  1593   116U  183U  229D  230M  231U  241D  246M  247B  249M  250B
                                                             252M  253B  256M  257B  263M  268U  280D  281M  282U  295M
                                                             296B  300D  319U  321D  322   369M
R2             1 00000002           U                  1580   125M  127   128   270M  276   286U  288D  368M
R3             1 00000003           U                  1581   283M  284   285   287   289M  290
R4             1 00000004           U                  1582   189   198M  199M  200   205M  206M  207   215M  294M
R5             1 00000005           U                  1583   197M  204M  322M  323U
R6             1 00000006           U                  1584   190M  191   192   195   200   207   211   212M  213   325M
                                                             326   355M  365M  366
R7             1 00000007           U                  1585   189   196M  200   201M  202   207   208M  209   215M
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| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAVE | 4 | 00000064 | 00000001 | F | F | | 159 | 125 | 126M | 150 | | |
| SAVEP | 4 | 00000264 | 00000001 | F | F | | 372 | 294 | 320M | 367 | 368 | |
| SEMCNT | 2 | 0000009C | FFFFFFFF | H | H | | 799 | 192 | 285 | | | |
| SRCE1S | 4 | 000000E0 | FFFFFFFF | F | F | | 829 | 830 | | | | |
| SYNAD | 4 | 00000194 | 00000001 | I | | | 270 | 480 | 535 | 590 | 642 | |
| SYNADX | 4 | 000001DA | 00000001 | I | | | 295 | 293B | | | | |
| SYNPR | 4 | 0000018E | 00000001 | I | | | 262 | 425 | | | | |
| SYSLIN | 4 | 0000032C | 00000001 | F | F | | 447 | 661 | | | | |
| SYSPRINT | 4 | 000002CC | 00000001 | F | F | | 392 | 660 | | | | |
| SYSPUNCH | 4 | 0000038C | 00000001 | F | F | | 502 | 662 | | | | |
| SYSUT2 | 4 | 000003EC | 00000001 | F | F | | 557 | 663 | | | | |
| SYSUT3 | 4 | 00000444 | 00000001 | F | F | | 609 | 664 | | | | |
| TERM | 1 | 00000004 | | U | | | 769 | 184 | | | | |
| TERMERR | 6 | 00000136 | 00000001 | I | | | 216 | 186B | | | | |
| TERR | 1 | 00000008 | | U | | | 749 | 217 | 291 | | | |
| WORKAREA | 1 | 00000000 | FFFFFFFF | J | | | 666 | 171U | | | | |

X390 3.1.04 2012/08/17 13.12

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)             X390 3.1.04  2012/08/17 13.12

    0(0)   123   129M  154M  320   367M
    1(1)   123   154M  197N  204   216   224   270   274M  276N  277   320   336M  337   340   343M  344   347   350M
           351   354   358M  359   362   363   364M
    2(2)   123   125M  127   128   154M  270M  276   286U  288D  320   368M
    3(3)   123   154M  283M  284   285   287   289M  289N  290   320   368M
    4(4)   123   154M  189   198M  199M  200   205M  206M  207   215M  294M  320   368M
    5(5)   123   154M  189   197M  199M  204M  206M  215M  294M  320   322M  323U  368M
    6(6)   123   154M  189   190M  191   192   195   200   207   211   212M  212N  213   215M  294M  320   325M  326
           355M  365M  366   368M
    7(7)   123   154M  189   196M  200N  201M  201N  202   207N  208M  208N  209   215M  294M  320   368M
    8(8)   123   154M  294M  320   368M
    9(9)   123   154M  294M  320   368M
   10(A)   123   154M  294M  320   368M
   11(B)   123   154M  294M  320   368M
   12(C)   123   154M  294M  320   324M  336   343   350   358   368M
   13(D)   123   126   127   128M  150M  153N  154   171U  294M
   14(E)   123   148M  149U  153M  155B  220B  227B  294M  320   338M  345M  352M  360M  367M  370B
   15(F)   116U  119B  123   133M  183U  229D  230M  231U  235M  241D  246M  247B  249M  250B  252M  253B  256M  257B
           263M  268U  280D  281M  282U  295M  296B  300D  319U  320   321D  322   337M  338B  344M  345B  351M  352B
           359M  360B  367M  369M
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| IHADCB | 00000060 | FFFFFFFE | 1019 | 1 | DCBD |
| WORKAREA | 00000CB6 | FFFFFFFF | 666 | | PRIMARY INPUT |

```
Con Source       Members                                                                          X390 3.1.04  2012/08/17 13.12

  1 SYS1.MACLIB
                 CLOSE    DCB      DCBD     IEZBITS  IEZREGS  IHBINNRA IHBINNRB IHB01    LINK     PUT      RETURN
                 SAVE     SPIE     XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
  4 SYSD.ALGOLF.MACLIB
                 WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text | X390 3.1.04 2012/08/17 13.12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 116 | | USING | Ordinary | 00000001 | 00000000 | 00001000 | 15 | 000B0 | 133 | IEX00000,R15 | |
| 149 | | USING | Ordinary | 00000001 | 00000054 | 00001000 | 14 | 00014 | 150 | *,R14 | |
| 171 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 13 | 001FE | 366 | WORKAREA,R13 | |
| 183 | | USING | Ordinary | 00000001 | 000000BA | 00001000 | 15 | 0020C | 224 | *,R15 | |
| 229 | | DROP | | | | | 15 | | | R15 | |
| 231 | | USING | Ordinary | 00000001 | 0000015E | 00001000 | 15 | 00016 | 235 | *,R15 | |
| 241 | | DROP | | | | | 15 | | | R15 | |
| 268 | | USING | Ordinary | 00000001 | 00000194 | 00001000 | 15 | 0000C | 274 | *,R15 | |
| 280 | | DROP | | | | | 15 | | | R15 | |
| 282 | | USING | Ordinary | 00000001 | 000001AC | 00001000 | 15 | 000B8 | 294 | *,R15 | |
| 286 | | USING | Ordinary | FFFFFFFE | 00000000 | 00001000 | 2 | 00028 | 287 | IHADCB,R2 | |
| 288 | | DROP | | | | | 2 | | | R2 | |
| 300 | | DROP | | | | | 15 | | | R15 | |
| 319 | | USING | Ordinary | 00000001 | 000001E2 | 00001000 | 15 | 0008E | 320 | IEX00PRI,R15 | |
| 321 | | DROP | | | | | 15 | | | R15 | |
| 323 | | USING | Ordinary | 00000001 | 000001E2 | 00001000 | 5 | 000E7 | 368 | IEX00PRI,R5 | |

```
The following statements were flagged -

  SYSD.ALGOLF.ASM(IEX00)
    149(138), 183(164), 231(210), 268(241), 282(249), 319(286), 323(290)

7 statements flagged in this assembly,  4 was the highest severity code.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X00    STEPNAME: IEX00    PROCSTEP: X390

Primary input:  lines      1 to     400 of SYSD.ALGOLF.ASM(IEX00)

SYSLIB library records read: 5038

SYSUT1 work file size: 114182 bytes

SYSUT2 work file size: 447528 bytes

SYSUT3 work file size: 32000 bytes

SYSLIN file records written: 28

TXA000I Return code 4, elapsed time 1.95 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX00000 | 00049C | 4 |

# IEX10

LEVEL

V2.M01

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX10)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131250.RA000.T1X10.OBJECT
SYSPRINT    JES2.JOB09269.SO0102
SYSUT1      SYS12230.T131250.RA000.T1X10.SYSUT1
SYSUT2      SYS12230.T131250.RA000.T1X10.SYSUT2
SYSUT3      SYS12230.T131250.RA000.T1X10.SYSUT3
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                      2 *                                                               00002001
                                      3 *       COMPONENT ID - 360S-AL-531 ALGOL F COMPILER             00003001
                                      4 *                                                               00004001
                                      5 *       FUNCTION/OPERATION -                                    00005001
                                      6 *       THIS MODULE PERFORMS THE FOLLOWING INITIALIZATION       00006001
                                      7 *       ACTIONS -                                               00007001
                                      8 *       1. SAVE THE REGISTERS AND ESTABLISH THE LOWER           00008001
                                      9 *          PART OF THE COMMON WORKAREA AS THE NEW SAVEAREA      00009001
                                     10 *          TO BE USED THROUGHOUT THE COMPILATION                00010001
                                     11 *       2. EXECUTE A SPIE MACRO                                 00011001
                                     12 *       3. SCAN THE OPTION PARAMETER FIELD PROVIDED BY THE USER 00012001
                                     13 *          AND SET THE SWITCHES IN COMPFLGS ACCORDINGLY         00013001
                                     14 *       4. IF PROVIDED BY THE USER, INSERT NEW DD NAMES INTO    00014001
                                     15 *          THE DCB'S AND STORE THE INITIAL PAGECOUNT IN THE COMMON 00015001
                                     16 *          COMMON WORKAREA                                      00016001
                                     17 *       5. OBTAIN STORAGE FOR THE ERROR POOL AND MOVE ANY ERROR 00017001
                                     18 *          PATTERNS ALREADY STORED FROM THE PRELIMINARY ERROR POOL 00018001
                                     19 *          INTO THE NEW POOL                                    00019001
                                     20 *       6. COMPLETE AND OPEN THE DCB'S FOR ALL DATASETS TO BE USED 00020001
                                     21 *       7. OBTAIN THE TIME AND DATE WITH A TIME MACRO           00021001
                                     22 *          STORE IT IN EDITED FORM IN A HEADLINE, WHICH IS      00022001
                                     23 *          PRINTED AT THE TOP OF THE FIRST PAGE                 00023001
                                     24 *       8. TRANSFER CONTROL TO THE SCANI/II PHASE (IEX11)       00024001
                                     25 *                                                               00025001
                                     26 *       IF ERRORS ARE DETECTED IN THE STEPS DESCRIBED ABOVE     00026001
                                     27 *       (SUCH AS INVALID OPTION PARAMETERS OR INCORRECT DD      00027001
                                     28 *       CARDS), SOME OF THE STEPS MAY BE BYPASSED, AND AN ERROR 00028001
                                     29 *       EXIT MAY BE TAKEN                                       00029001
                                     30 *                                                               00030001
                                     31 *       ENTRY POINTS -                                          00031001
                                     32 *       IEX10000 - THE ONLY ENTRY POINT TO THIS MODULE          00032001
                                     33 *                  CONTROL IS TRANSFERRED HERE FROM IEX00 BY THE 00033001
                                     34 *                  MACRO LINK EP=IEX10. R0 THEN CONTAINS THE    00034001
                                     35 *                  ADDR OF THE COMMON WORKAREA AND R1 THE ADDR  00035001
                                     36 *                  OF THE PARAMETER LIST PROVIDED BY THE USER   00036001
                                     37 *                                                               00037001
                                     38 *       INPUT - N/A                                             00038001
                                     39 *                                                               00039001
                                     40 *       OUTPUT -                                                00040001
                                     41 *       THE TEXT STORED AT FIRSTLIN IS OUTPUT TO SYSPRINT AS A  00041001
                                     42 *       91-CHARACTER RECORD WITH MACHINE CONTROL CHARACTER      00042001
                                     43 *                                                               00043001
                                     44 *       EXTERNAL ROUTINES - N/A                                 00044001
                                     45 *                                                               00045001
                                     46 *       IF NO TERMINATING ERRORS ARE FOUND, CONTROL IS          00046001
                                     47 *       TRANSFERRED TO THE SCANI/II PHASE BY MEANS OF THE MACRO 00047001
                                     48 *       'XCTL EP=IEX11'                                         00048001
                                     49 *                                                               00049001
                                     50 *       EXITS - ERRORS -                                        00050001
                                     51 *       IF A PROGRAM CHECK OR UNRECOVERABLE I/O ERROR OCCURS    00051001
                                     52 *       DURING ONE OF THE INITIALIZATION STEPS, CONTROL IS      00052001
                                     53 *       TRANSFERRED (VIA AN ERROR ROUTINE IN IEX00) TO THE      00053001
                                     54 *       ROUTINE GOTOTERM IN THIS MODULE. FROM THERE AN EXIT IS  00054001
                                     55 *       MADE TO THE TERMINATING PHASE BY MEANS OF THE MACRO     00055001
                                     56 *       XCTL EP=IEX51002                                        00056001
                                     57 *                                                               00057001
                                     58 *       IF ANY OTHER TERMINATING ERROR IS DETECTED, CONTROL IS  00058001
                                     59 *       TRANSFERRED TO THE ROUTINE GOTOEDIT IN THIS MODULE. FROM 00059001
                                     60 *       THERE AN EXIT IS MADE TO THE ERROR EDITING MODULE BY    00060001
                                     61 *       MEANS OF THE MACRO XCTL EP=IEX21000                     00061001
                                     62 *                                                               00062001
                                     63 *       TABLES/WORK AREAS -                                     00063001
                                     64 *       STARTING AT PTRN200 - ERROR PATTERNS FOR ALL            00064001
                                     65 *                  ERRORS WHICH MAY BE DETECTED IN THIS MODULE  00065001
                                     66 *       FIRSTLIN - THE FIRST OUTPUT LINE TO BE PRINTED          00066001
                                     67 *                  CONTAINS PROGRAM IDENTIFICATION AND          00067001
                                     68 *                  LEVEL AND THE DATE OF THE RUN                00068001
                                     69 *       PARMLIST - A TABLE USED FOR DECODING THE OPTION         00069001
                                     70 *                  PARAMETERS                                   00070001
                                     71 *                                                               00071001
                                     72 *       ATTRIBUTES - NOT REUSABLE                               00072001
                                     73 *                                                               00073001
                                     74 *       NOTES -                                                 00074001
                                     75 *       THIS MODULE IS ONLY INTENDED TO BE USED IN CONNECTION   00075001
                                     76 *       WITH THE OTHER MODULES COMPRISING THE ALGOL COMPILER    00076001
                                     77 *                                                               00077001
                                     78 *       THE OPERATION OF THIS MODULE DEPENDS UPON AN INTERNAL   00078001
                                     79 *       REPRESENTATION OF THE EXTERNAL CHARACTER SET WHICH IS   00079001
                                     80 *       EQUIVALENT TO THE ONE USED AT ASSEMBLY TIME             00080001
                                     81 *                                                               00081001
000000                 00000 00812   82 IEX10000 CSECT                                                  00082001
                                     83 *                                                               00083001
                                     84 *       REGISTER ASSIGNMENTS                                    00084001
                                     85 *                                                               00085001
                                     86 *       R4         RUNNING ADDR OF PARAMETER FIELD MINUS 2      00086001
                                     87 *       R5         ADDR OF BYTE FOLLOWING LAST BYTE OF FIELD MINUS 2 00087001
                                     88 *       R6         RUNNING ADDR OF PARAMETER LIST               00088001
                                     89 *       R7         ADDR OF LAST ENTRY OF PARAMETER LIST         00089001
                                     90 *       R8         LENGTH-1 OF PARAMETER                        00090001
                                     91 *       R9         CURRENT FIELD IN ERROR POOL                  00091001
                                     92 *       R10        NEXT FIELD IN ERROR POOL                     00092001
                                     93 *       R11        BYTE COUNT OF PARAMETER IN ERROR             00093001
                                     94 *                                                               00094001
                                     95         SAVE  (14,12),,'IEX10000 LEVEL 2.1 &SYSDATE &SYSTIME'   00095001
000000 47F0 F026             00026   96+        B     38(0,15)                 BRANCH AROUND ID         01-SAVE
000004 21                            97+        DC    AL1(33)                  LENGTH OF IDENTIFIER     01-SAVE
```

```
  Active USINGs: None

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.12

000005 C9C5E7F1F0F0F0F0              98+         DC    CL32'IEX10000 LEVEL 2.1 08/17/12 13.1' IDENTIFIER        01-SAVE
000025 F2                            99+         DC    CL1'2'                                 IDENTIFIER        01-SAVE
000026 90EC D00C            0000C   100+         STM   14,12,12(13)                           SAVE REGISTERS    01-SAVE
                                    101 *                                                                       00096001
00002A 182F                         102          LR    R2,R15                       SET BASE                    00097001
                  R:2  00000        103          USING IEX10000,R2                                              00098001
00002C 500D 0008            00008   104          ST    R0,8(R13)                    ADDR OF LOWER LEVEL SAVAREA 00099001
000030 18CD                         105          LR    R12,R13                                                  00100001
000032 18D0                         106          LR    R13,R0                                                   00101001
000034 50CD 0004            00004   107          ST    R12,4(R13)                   ADDR OF HIGHER LEVEL SAVEAREA 00102001
                  R:D  00000        108          USING WORKAREA,R13                                             00103001
                                    109 *                                                                       00104001
                                    110 *        EXECUTE THE SPIE MACRO                                         00105001
                                    111 *                                                                       00106001
000038 5830 D088            00088   112          L     R3,PICAADD                   ADDR OF PICA OF COMPILER    00107001
                                    113 *                                                                       00108001
                                    114          SPIE  MF=(E,(3))                                               00109001
00003C 1813                         115+         LR    1,3                                    LOAD PARAMETER REG 1  02-IHBIN
00003E 0A0E                         116+         SVC   14                           ISSUE THE SPIE SVC          01-SPIE
                                    117 *                                                                       00110001
000040 5010 D088            00088   118          ST    R1,PICAADD                   STORE ADDR OF OLD PICA IN   00111001
000044 D203 D090 24F8 00090 004F8   119          MVC   ERET,=A(GOTOTERM)            ERROR ROUT FOR NEXT PART    00112001
                                    120 *                                           OF PHASE                    00113001
                                    121 *                                                                       00114001
                                    122 *        INTERROGATE THE CONTROL PARAMETERS AND SET SWITCHES IN         00115001
                                    123 *        THE WORKAREA                                                   00116001
                                    124 *                                                                       00117001
00004A 58E0 D004            00004   125          L     R14,4(,R13)                                              00118001
00004E 58E0 E018            00018   126          L     R14,24(,R14)                 GET CALLERS R1              00119001
000052 12EE                         127          LTR   R14,R14                      ZERO ?                      00120001
000054 4780 220A            0020A   128          BZ    BYPASSOP                     YES, NO OPTIONS ARE SPECIFIED 00121001
000058 5840 E000            00000   129          L     R4,0(,14)                    ADDR OF PARMETER FIELD      00122001
00005C 4140 4000            00000   130          LA    R4,0(,R4)                    RESET HIGH ORDER BYTE       00123001
000060 4850 4000            00000   131          LH    R5,0(,R4)                    FIELD LENGTH                00124001
000064 1255                         132          LTR   R5,R5                        NONZERO FIELD LENGTH ?      00125001
000066 4780 21A8            001A8   133          BZ    DDNAMES                      NO CONTROL PARAMETERS SPECIFIED 00126001
00006A 1A54                         134          AR    R5,R4                        END OF FIELD                00127001
00006C 4170 2780            00780   135          LA    R7,LSTENTRY                  LAST ENTRY OF LIST          00128001
000070 1B88                         136          SR    R8,R8                        ZERO REG                    00129001
000072 956B 4002      00002         137 FNDCOMMA CLI   2(R4),C','                   COMMA ?                     00130001
000076 4770 209A            0009A   138          BNE   FNDPAR                       NO, BRANCH                  00131001
00007A 4140 4001            00001   139 STEP1    LA    R4,1(,R4)                    STEP FIELD                  00132001
00007E 1945                         140 COMP1    CR    R4,R5                                                    00133001
000080 4740 2072            00072   141          BL    FNDCOMMA                     IF NOT END OF FIELD YET     00134001
000084 9160 D081      00081         142          TM    COMPFLGS+1,NLOAD+NDECK       NOLOAD AND NODECK ?         00135001
000088 47E0 21A8            001A8   143          BNO   DDNAMES                      NO, BRANCH                  00136001
00008C 9680 D080      00080         144          OI    COMPFLGS,COMPMODE            YES, FORCE SYNTAX MODE ONLY 00137001
000090 47F0 21A8            001A8   145          B     DDNAMES                      END OF FIELD                00138001
                                    146 *                                                                       00139001
                  R:6  00614        147          USING LENGTH,R6                                                00140001
** TXA533W USING range overlaps prior USING at statement 103.
** TXA301I Record 140 in SYSD.ALGOLF.ASM(IEX10)
000094 D500 4002 6001 00002 00615   148 COMPINST CLC   2(0,R4),PARAM                                            00141001
00009A D504 4002 2518 00002 00518   149 FNDPAR   CLC   2(5,R4),=C'SIZE='                                        00142001
0000A0 4780 2120            00120   150          BE    FNDSIZE                                                  00143001
0000A4 4160 2605            00605   151          LA    R6,PARMLIST                                              00144001
0000A8 4380 6000            00614   152 NXTPAR   IC    R8,LENGTH                                                00145001
0000AC 4480 2094            00094   153          EX    R8,COMPINST                                              00146001
0000B0 4770 20D0            000D0   154          BNE   NOTFOUND                                                 00147001
0000B4 41A4 8001            00001   155          LA    R10,1(R4,R8)                 ADDR OF BYTE FOLLOWING      00148001
                                    156 *                                           PARAMETER-2                 00149001
0000B8 956B A002      00002         157          CLI   2(R10),C','                  COMMA ?                     00150001
0000BC 4780 20C6            000C6   158          BE    SETBIT                       YES, BRANCH                 00151001
0000C0 19A5                         159          CR    R10,R5                       END OF PARAMETER FIELD ?    00152001
0000C2 4740 20DA            000DA   160          BL    ERROR200                     IF NO                       00153001
0000C6 184A                         161 SETBIT   LR    R4,R10                                                   00154001
0000C8 4400 600A            0061E   162          EX    0,INSTR                                                  00155001
                                    163          DROP  R6                                                       00156001
0000CC 47F0 207E            0007E   164          B     COMP1                                                    00157001
                                    165 *                                                                       00158001
0000D0 1967                         166 NOTFOUND CR    R6,R7                                                    00159001
0000D2 4166 000F            0000F   167          LA    R6,LENGTH-PARMLIST(R6)       STEP LIST ADDR              00160001
0000D6 4740 20A8            000A8   168          BL    NXTPAR                       IF NOT END OF LIST YET      00161001
                                    169 *                                                                       00162001
0000DA 5890 D0C0            000C0   170 ERROR200 L     R9,NEXTERR                   ADDR OF NEXT FREE BYTE      00163001
                                    171 *                                           IN ERRORPOOL                00164001
0000DE 95E7 9000      00000         172          CLI   0(R9),C'X'                   TEST IF THE PRELIMINARY ERROR 00165001
0000E2 4780 2196            00196   173          BE    FULLPOOL                     POOL IS FILLED              00166001
0000E6 41A9 0010            00010   174          LA    R10,16(R9)                                               00167001
0000EA 50A0 D0C0            000C0   175          ST    R10,NEXTERR                                              00168001
0000EE D20F 9000 253C 00000 0053C   176          MVC   0(16,R9),PTRN200             PATTERN WITH BLANKS         00169001
                                    177 *                                           TO ERROR POOL               00170001
0000F4 41B0 000C            0000C   178          LA    R11,12(0)                                                00171001
0000F8 D200 9004 4002 00004 00002   179 MOVE     MVC   4(1,R9),2(R4)                                            00172001
0000FE 4199 0001            00001   180          LA    R9,1(R9)                                                 00173001
000102 4144 0001            00001   181 MOVENOT  LA    R4,1(R4)                                                 00174001
000106 956B 4002      00002         182          CLI   2(R4),C','                                               00175001
00010A 4780 207A            0007A   183          BE    STEP1                        IF END OF PARAMETER         00176001
00010E 1545                         184          CLR   R4,R5                                                    00177001
000110 47B0 21A8            001A8   185          BNL   DDNAMES                      IF END OF PARAMETER LIST    00178001
000114 4BB0 2510            00510   186          SH    R11,=H'1'                                                00179001
000118 4720 20F8            000F8   187          BP    MOVE                                                     00180001
00011C 47F0 2102            00102   188          B     MOVENOT                                                  00181001
                                    189 *                                                                       00182001
000120 41A4 0005            00005   190 FNDSIZE  LA    R10,5(R4)                    ADDR OF FIRST DIGIT -2      00183001
000124 1BBB                         191          SR    R11,R11                      SET COUNT OF DIGITS TO ZERO 00184001
```

```
  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

000126 95F0 A002        00002         192 TSTDIGIT CLI   2(R10),C'0'             TEST IF                     00185001
00012A 4740 20DA              000DA   193          BL    ERROR200                THE CHARACTER               00186001
00012E 95F9 A002        00002         194          CLI   2(R10),C'9'             IS A DIGIT                  00187001
000132 4720 20DA              000DA   195          BH    ERROR200                                            00188001
000136 41AA 0001              00001   196          LA    R10,1(R10)                                          00189001
00013A 19A5                           197          CR    R10,R5                  END OF PARAMTER FIELD ?     00190001
00013C 4780 215E              0015E   198          BE    PCKSIZE                                             00191001
000140 956B A002        00002         199          CLI   2(R10),C','             DIGIT IS FOLLOWED ?         00192001
                                      200 *                                      BY A COMMA                  00193001
000144 4780 215E              0015E   201          BE    PCKSIZE                                             00194001
000148 41BB 0001              00001   202          LA    R11,1(R11)              ADD 1 TO DIGIT COUNT        00195001
00014C 49B0 2512              00512   203          CH    R11,=H'7'               TEST IF TOO MANY DIGITS     00196001
000150 4780 20DA              000DA   204          BE    ERROR200                                            00197001
000154 47F0 2126              00126   205          B     TSTDIGIT                                            00198001
                                      206 *                                                                  00199001
000158 F270 2790 4007 00790 00007     207 PCKINSTR PACK  FIELD1,7(0,R4)                                      00200001
00015E 44B0 2158              00158   208 PCKSIZE  EX    R11,PCKINSTR            L2 IS IN TEGH               00201001
000162 4F60 2790              00790   209          CVB   R6,FIELD1                                           00202001
000166 184A                           210          LR    R4,R10                                              00203001
000168 5960 24FC              004FC   211          C     R6,=F'45056'            SPECIFIED STORAGE SIZE      00204001
00016C 4740 2178              00178   212          BL    ERROR208                IS TOO SMALL ?              00205001
000170 5060 D084              00084   213          ST    R6,SIZE                                             00206001
000174 47F0 207E              0007E   214          B     COMP1                                               00207001
                                      215 *                                                                  00208001
000178 5890 D0C0              000C0   216 ERROR208 L     R9,NEXTERR                                          00209001
00017C D203 9000 2588 00000 00588     217          MVC   0(4,R9),PTRN208         PATTERN FOR MSG 208         00210001
                                      218 *                                      TO ERROR POOL               00211001
000182 4199 0004              00004   219          LA    R9,4(R9)                UPDATE POINTER TO NEXT      00212001
000186 95E7 9000        00000         220          CLI   0(R9),C'X'              TEST IF THE PRELIMINARY ERROR 00213001
00018A 4780 2196              00196   221          BE    FULLPOOL                POOL IS FILLED              00214001
00018E 5090 D0C0              000C0   222          ST    R9,NEXTERR              FREE ENTRY                  00215001
000192 47F0 207E              0007E   223          B     COMP1                                               00216001
                                      224 *                                                                  00217001
000196 D203 9000 2580 00000 00580     225 FULLPOOL MVC   0(4,R9),PTRN206         PATTERN FOR MESSAGE 206     00218001
00019C 4199 0004              00004   226          LA    R9,4(R9)                UPDATE POINTER TO           00219001
0001A0 5090 D0C0              000C0   227          ST    R9,NEXTERR              NEXT FREE ENTRY             00220001
0001A4 47F0 21A8              001A8   228          B     DDNAMES                 NO PARAMETER TESTING ANY MORE 00221001
                                      229 *                                                                  00222001
                                      230 *        FIND THE DD NAMES                                         00223001
                                      231 *                                                                  00224001
0001A8 9180 E000        00000         232 DDNAMES  TM    0(14),X'80'                                         00225001
0001AC 4710 220A              0020A   233          BO    BYPASSOP                IF NO DDNAMES AND HEADING INFO 00226001
0001B0 584E 0004              00004   234          L     R4,4(14)                                            00227001
0001B4 4854 0000              00000   235          LH    R5,0(R4)                                            00228001
0001B8 1255                           236          LTR   R5,R5                                               00229001
0001BA 4780 220A              0020A   237          BZ    BYPASSOP                IF NO DDNAMES SPECIFIED     00230001
0001BE 5550 2500              00500   238          CL    R5,=F'80'               MORE THAN TEN               00231001
0001C2 47D0 21DC              001DC   239          BNH   FNDDCB-4                DD NAMES                    00232001
0001C6 5850 2500              00500   240          L     R5,=F'80'               NOT ALLOWED                 00233001
0001CA 5890 D0C0              000C0   241          L     R9,NEXTERR                                          00234001
0001CE D203 9000 2584 00000 00584     242          MVC   0(4,R9),PTRN207         PATTERN TO ERROR POOL       00235001
0001D4 4199 0004              00004   243          LA    R9,4(R9)                UPDATE POINTER              00236001
0001D8 5090 D0C0              000C0   244          ST    R9,NEXTERR              TO ERROR POOL               00237001
0001DC 4160 D048              00048   245          LA    R6,DCBTABLE             R6 -> TABLE OF DCB ADDRS    00238001
0001E0 5876 0000              00000   246 FNDDCB   L     R7,0(R6)                                            00239001
0001E4 1277                           247          LTR   R7,R7                   THIS DATASET EXIST ?        00240001
0001E6 4780 21FA              001FA   248          BZ    NXTDDNAM                NO, BRANCH                  00241001
0001EA D507 4002 24F0 00002 004F0     249          CLC   2(8,R4),=XL8'00'        NULL DDNAME ?               00242001
0001F0 4780 21FA              001FA   250          BE    NXTDDNAM                YES, BRANCH                 00243001
                   R:7  00000         251          USING IHADCB,R7                                           00244001
0001F4 D207 7028 4002 00028 00002     252          MVC   DCBDDNAM,2(R4)          MOVE IN OVERRIDE DDNAME     00245001
                                      253          DROP  R7                                              00246001
0001FA 4144 0008              00008   254 NXTDDNAM LA    R4,8(R4)                INCR DDNAME PTR             00247001
0001FE 4166 0004              00004   255          LA    R6,4(R6)                                            00248001
000202 4B50 2514              00514   256          SH    R5,=H'8'                DECR COUNT                  00249001
000206 4720 21E0              001E0   257          BP    FNDDCB                                              00250001
                                      258 *                                                                  00251001
                                      259 *        ACQUIRE THE ERROR POOL AND THE SOURCE PROG BUFFER 1       00252001
                                      260 *        STORE CONTENT OF PRELIMINARY ERROR POOL IN NEW ERROR      00253001
                                      261 *        POOL                                                      00254001
                                      262 *                                                                  00255001
00020A 5800 D0DC              000DC   263 BYPASSOP L     R0,POOLS                SIZE OF ERROR POOL          00256001
00020E 1840                           264          LR    R4,R0                                               00257001
000210 5A00 D0E0              000E0   265          A     R0,SRCE1S               SIZE OF SOURCE PROG BUFFER 1 00258001
000214 1860                           266          LR    R6,R0                   SIZE OF TOTAL AREA          00259001
                                      267 *                                                                  00260001
                                      268          GETMAIN R,LV=(0)                                          00261001
                                      269+*        OS/VS2 RELEASE 4 VERSION -- 10/21/75                      01-GETMA
000216 4510 221A              0021A   270+         BAL   1,*+4                           INDICATE GETMAIN    01-GETMA
00021A 0A0A                           271+         SVC   10                              ISSUE GETMAIN SVC   01-GETMA
                                      272 *                                                                  00262001
00021C 9702 D081        00081         273          XI    COMPFLGS+1,NOBUF        COMMON BUFFER AREA PRESENT  00263001
000220 5850 D0C0              000C0   274          L     R5,NEXTERR              ADDR OF NEXT FREE BYTE      00264001
                                      275 *                                      IN PREL POOL                00265001
000224 4170 D278              00278   276          LA    R7,PRELPOOL             ADDR OF BEGIN OF PREL POOL  00266001
000228 1B57                           277          SR    R5,R7                   NUMBER OF BYTES IN ERROR POOL 00267001
00022A 4450 2232              00232   278          EX    R5,MVCPOOL                                          00268001
00022E 47F0 2238              00238   279          B     JUMPEXEA                BRANCH AROUND MVC INSTR     00269001
                                      280 *                                                                  00270001
000232 D200 1000 D278 00000 00278     281 MVCPOOL  MVC   0(0,R1),PRELPOOL        EXE INSTRUCTION             00271001
                                      282 *                                                                  00272001
000238 5010 D0BC              000BC   283 JUMPEXEA ST    R1,ERRPOOL              ADDR OF FIRST BYTE OF POOL  00273001
00023C 1A51                           284          AR    R5,R1                   ADDR OF NEXT FREE BYTE      00274001
00023E 5050 D0C0              000C0   285          ST    R5,NEXTERR                                          00275001
000242 1A41                           286          AR    R4,R1                   ADDR OF END OF POOL +1      00276001
000244 5040 D0C8              000C8   287          ST    R4,SRCE1ADD             ADDR OF SOURCE PROG BUFFER 1 00277001
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  Active USINGs: WORKAREA,R13  IEX10000,R2

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

000248 1A61                         288          AR    R6,R1               END ADDR OF SOURCE PROG BUFFER 1 00278001
00024A 5060 D0CC            000CC   289          ST    R6,SRCE1END                                        00279001
00024E 4B40 2516            00516   290          SH    R4,=H'24'           ADDR OF END OF POOL-23         00280001
000252 5040 D0C4            000C4   291          ST    R4,ENDPOOL                                         00281001
                                    292 *                                                             00282001
                                    293 *        COMPLETE THE DCBS                                    00283001
                                    294 *                                                             00284001
000256 983C D048            00048   295          LM    R3,R12,DCBTABLE     ADDRS OF THE DCBS              00285001
                                    296 *                                  R4, R5, R6 NOT USED            00286001
                 R:3  00000         297          USING IHADCB,R3           SYSLIN DCB                     00287001
00025A D202 3025 251D 00025 0051D   298          MVC   DCBEXLST+1(3),=AL3(LINEX)  ADDR OF EXLIST          00288001
                                    299          DROP  R3                                                 00289001
                 R:7  00000         300          USING IHADCB,R7           SYSIN DCB                      00290001
000260 D202 7025 2520 00025 00520   301          MVC   DCBEXLST+1(3),=AL3(INEX)  ADDR OF EXLIST           00291001
                                    302          DROP  R7                                                 00292001
                 R:8  00000         303          USING IHADCB,R8                                          00293001
000266 D202 8025 2523 00025 00523   304          MVC   DCBEXLSA,=AL3(PRINTEX)  EXLIST FOR PRINT DCB       00294001
                                    305          DROP  R8                                                 00295001
                 R:9  00000         306          USING IHADCB,R9           SYSPUNCH DCB                   00296001
00026C D202 9025 2526 00025 00526   307          MVC   DCBEXLST+1(3),=AL3(PCHEX)  ADDR OF EXLIST          00297001
                                    308          DROP  R9                                                 00298001
                 R:A  00000         309          USING IHADCB,R10          SYSUT1 DCB                     00299001
000272 4840 D0E2            000E2   310          LH    R4,SRCE1S+2         SOURCE PROG BUFFER 1 SIZE      00300001
000276 4040 A03E            0003E   311          STH   R4,DCBBLKSI         BLOCK SIZE                     00301001
                                    312          DROP  R10                                                00302001
                 R:B  00000         313          USING IHADCB,R11          SYSUT2 DCB                     00303001
00027A 4040 B03E            0003E   314          STH   R4,DCBBLKSI         BLOCK SIZE                     00304001
                                    315          DROP  R11                                                00305001
00027E D203 D090 2504 00090 00504   316          MVC   ERET,=A(OPEXERR)    ERROR ROUTINE FOR OPEN EXIT    00306001
                                    317 *                                  ROUTINES                       00307001
                                    318 *                                                             00308001
                                    319 *        OPEN THE SYSLIN, SYSPRINT, SYSPUNCH, SYSUT2 AND SYSUT3 DCBS  00309001
                                    320 *                                                             00310001
                                    321          OPEN  ((3),OUTPUT,(8),OUTPUT,(9),OUTPUT,(11),OUTIN,(12),OUTIN) 00311001
000284                              322+         CNOP  0,4                           ALIGN LIST TO FULLWORD 01-OPEN
000284 4510 229C            0029C   323+         BAL   1,*+24                        LOAD REG1 W/LIST ADDR. 01-OPEN
000288 00000000                     324+         DC    A(0)                          OPT BYTE AND DCB ADDR. 01-OPEN
00028C 00000000                     325+         DC    A(0)                          OPT BYTE AND DCB ADDR. 01-OPEN
000290 00000000                     326+         DC    A(0)                          OPT BYTE AND DCB ADDR. 01-OPEN
000294 00000000                     327+         DC    A(0)                          OPT BYTE AND DCB ADDR. 01-OPEN
000298 00000000                     328+         DC    A(0)                          OPT BYTE AND DCB ADDR. 01-OPEN
00029C 5031 0000            00000   329+         ST    3,0(1,0)                      STORE INTO LIST        01-OPEN
0002A0 920F 1000      00000         330+         MVI   0(1),15                       MOVE IN OPTION BYTE    01-OPEN
0002A4 5081 0004            00004   331+         ST    8,4(1,0)                      STORE INTO LIST        01-OPEN
0002A8 920F 1004      00004         332+         MVI   4(1),15                       MOVE IN OPTION BYTE    01-OPEN
0002AC 5091 0008            00008   333+         ST    9,8(1,0)                      STORE INTO LIST        01-OPEN
0002B0 920F 1008      00008         334+         MVI   8(1),15                       MOVE IN OPTION BYTE    01-OPEN
0002B4 50B1 000C            0000C   335+         ST    11,12(1,0)                    STORE INTO LIST        01-OPEN
0002B8 9207 100C      0000C         336+         MVI   12(1),7                       MOVE IN OPTION BYTE    01-OPEN
0002BC 50C1 0010            00010   337+         ST    12,16(1,0)                    STORE INTO LIST        01-OPEN
0002C0 9287 1010      00010         338+         MVI   16(1),135                     MOVE IN OPTION BYTE    01-OPEN
0002C4 0A13                         339+         SVC   19                            ISSUE OPEN SVC         01-OPEN
                                    340 *                                                             00312001
                                    341          OPEN  ((10),OUTIN,(R7),INPUT)  OPEN SYSUT1 AND SYSIN DCBS    00313001
0002C6 0700                         342+         CNOP  0,4                           ALIGN LIST TO FULLWORD 01-OPEN
0002C8 4510 22D4            002D4   343+         BAL   1,*+12                        LOAD REG1 W/LIST ADDR. 01-OPEN
0002CC 00000000                     344+         DC    A(0)                          OPT BYTE AND DCB ADDR. 01-OPEN
0002D0 00000000                     345+         DC    A(0)                          OPT BYTE AND DCB ADDR. 01-OPEN
0002D4 50A1 0000            00000   346+         ST    10,0(1,0)                     STORE INTO LIST        01-OPEN
0002D8 9207 1000      00000         347+         MVI   0(1),7                        MOVE IN OPTION BYTE    01-OPEN
0002DC 5071 0004            00004   348+         ST    R7,4(1,0)                     STORE INTO LIST        01-OPEN
0002E0 9280 1004      00004         349+         MVI   4(1),128                      MOVE IN OPTION BYTE    01-OPEN
0002E4 0A13                         350+         SVC   19                            ISSUE OPEN SVC         01-OPEN
                                    351 *                                                             00314001
0002E6 D203 D090 24F8 00090 004F8   352          MVC   ERET,=A(GOTOTERM)                                  00315001
                                    353 *                                                             00316001
                                    354 *        TEST IF THE SYSPRINT DCB HAS BEEN OPENED             00317001
                                    355 *                                                             00318001
                 R:8  00000         356          USING IHADCB,R8                                          00319001
0002EC 9110 8030      00030         357 TSTDCB   TM    DCBOFLGS,DCBOFOPN   OPEN SUCCESSFULL ?             00320001
                                    358          DROP  R8                                                 00321001
0002F0 4710 2302            00302   359          BO    EDITDATE            YES, BRANCH                    00322001
0002F4 9610 D082      00082         360          OI    COMPFLGS+2,PRTNO    SYSPRINT DCB FAILED TO OPEN    00323001
0002F8 1878                         361          LR    R7,R8               DCB ADDR                       00324001
0002FA 5840 D0C0            000C0   362          L     R4,NEXTERR                                         00325001
0002FE 47F0 23D2            003D2   363          B     ERROR201                                           00326001
                                    364 *                                                             00327001
                                    365 *        GET DATE AND TRANSLATE IT TO DD MMM YYYY HH:MM:SS    00328001
                                    366 *                                                             00329001
                                    367 EDITDATE TIME  DEC                 GET SYSTEM DATE                00330001
                                    368+* /* MACDATE Y-1 72277                                      */ 01-TIME
                                    369+* /*                                                           01-TIME
000302 4110 0002            00002   370+EDITDATE LA    1,2(0,0)                      LOAD 1 TO SPECIFY UNIT 01-TIME
000306 0A0B                         371+         SVC   11                            ISSUE TIME SVC         01-TIME
                                    372 *                                                             00331001
000308 9001 27A8            007A8   373          STM   R0,R1,TEMP2         STORE SYSTEM TIME AND DATE     00332001
                                    374 *                                  INTO TEMP2 AND TEMP3           00333001
00030C DE08 25EE 27A8 005EE 007A8   375          ED    HEADTIME,TEMP2      FORMAT TIME                    00334001
000312 F321 2798 27AD 00798 007AD   376          UNPK  TEMP(3),TEMP3+1(2)  UNPACK YY                      00335001
000318 D201 25EC 2798 005EC 00798   377          MVC   HEADYEAR+2(2),TEMP  MOVE YEAR ACROSS               00336001
00031E F871 27A0 27AE 007A0 007AE   378          ZAP   TEMP1,TEMP3+2(2)    JULIN DAY NO INTO DOUBLE WORD  00337001
000324 4FE0 27A0            007A0   379          CVB   R14,TEMP1           GET JULIAN DAY IN BINARY       00338001
000328 41F0 27B0            007B0   380          LA    R15,MNTHTBL         R15 -> MNTHTBL                 00339001
00032C 4BF0 2514            00514   381          SH    R15,=H'8'           ADJUST ADDR FOR FIRST ITERATION  00340001
000330 9101 27AD      007AD         382          TM    TEMP3+1,X'01'       IF ODD YEAR THEN               00341001
000334 4710 2340            00340   383          BO    NOTLEAP             NOT LEAP YEAR                  00342001
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  Active USINGs: WORKAREA,R13  IEX10000,R2

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                       X390 3.1.04  2012/08/17 13.12

000338 9112 27AD        007AD         384          TM    TEMP3+1,X'12'          TEST FOR LEAP (OK TILL 2099)    00343001
00033C 47B0 234C              0034C   385          BNM   NEXTMNTH               IF MIXED NOT LEAP YEAR          00344001
000340 49E0 2810              00810   386 NOTLEAP  CH    R14,H60                DDD AFTER 28TH FEBRUARY?        00345001
000344 4740 234C              0034C   387          BL    NEXTMNTH               NO, LEAP YEAR IRRELEVANT        00346001
000348 41E0 E001              00001   388          LA    R14,1(,R14)            YES, FUDGE DDD ACCORDINGLY      00347001
00034C 41F0 F008              00008   389 NEXTMNTH LA    R15,8(,R15)            INCREMENT THRU MONTH TABLE      00348001
000350 4BE0 F000              00000   390          SH    R14,0(,R15)            DECREASE NUMBER OF DAYS         00349001
000354 4720 234C              0034C   391          BP    NEXTMNTH               NOT YET, TRY NEXT MONTH         00350001
                                      392 *                                     FOUND THE CORRECT MONTH         00351001
000358 4AE0 F000              00000   393          AH    R14,0(,R15)            ADD BACK THE DAYS IN MONTH      00352001
00035C 4EE0 27A0              007A0   394          CVD   R14,TEMP1              GET DAY OF MONTH                00353001
000360 960F 27A7        007A7         395          OI    TEMP1+7,X'0F'          MAKE UNPK RESULT PRINTABLE      00354001
000364 F311 25E3 27A6 005E3 007A6     396          UNPK  HEADDAY,TEMP1+6(2)     FORMAT DAY OF MONTH             00355001
00036A D202 25E6 F002 005E6 00002     397          MVC   HEADMON,2(R15)         MOVE IN MONTH NAME              00356001
                                      398 *                                                                     00357001
                                      399 *        SETUP HEADING LINE                                           00358001
                                      400 *                                                                     00359001
000370 D278 D10C 258C 0010C 0058C     401          MVC   PAGEHD1,HEADING        FIRST LINE ON PAGE              00360001
                                      402 *                                                                     00361001
000376 D203 D090 2508 00090 00508     403          MVC   ERET,=A(GOTOEDIT)      ERROR ROUTINE FOR REST OF PHASE 00362001
                                      404 *                                                                     00363001
                                      405 *        TEST IF THE OTHER DCBS HAVE BEEN OPENED                      00364001
                                      406 *                                                                     00365001
00037C 983C D048              00048   407          LM    R3,R12,DCBTABLE        R3 -> SYSLIN DCB                00366001
000380 5840 D0C0              000C0   408          L     R4,NEXTERR                                             00367001
                  R:3  00000          409          USING IHADCB,R3                                              00368001
000384 9140 D081        00081         410          TM    COMPFLGS+1,NLOAD       NOLOAD SPECIFIED ?              00369001
000388 4710 23A2              003A2   411          BO    TSTPUNCH               YES, BRANCH                     00370001
00038C 9110 3030        00030         412          TM    DCBOFLGS,DCBOFOPN      DCB OPENED SUCCESSFULLY ?       00371001
000390 4710 23A2              003A2   413          BO    TSTPUNCH               YES, BRANCH                     00372001
000394 9640 D081        00081         414          OI    COMPFLGS+1,NLOAD       NO, SET NOLOAD OPTION           00373001
000398 D203 4000 2550 00000 00550     415          MVC   0(4,R4),PTRN202        PATTERN FOR MSG 202             00374001
00039E 4144 0004              00004   416          LA    R4,4(R4)               POINTER TO NEXT FREE ENTRY      00375001
                                      417          DROP  R3                                                     00376001
                  R:9  00000          418          USING IHADCB,R9              R9 -> SYSPUNCH                  00377001
0003A2 9120 D081        00081         419 TSTPUNCH TM    COMPFLGS+1,NDECK       NODECK SPECIFIED ?              00378001
0003A6 4710 23C0              003C0   420          BO    TSTIN                  YES, BRANCH                     00379001
0003AA 9110 9030        00030         421          TM    DCBOFLGS,DCBOFOPN      SYSPUNCH DCB OPEN SUCESSFULLY ? 00380001
0003AE 4710 23C0              003C0   422          BO    TSTIN                  YES, BRANCH                     00381001
0003B2 9620 D081        00081         423          OI    COMPFLGS+1,NDECK       NO, SET NODECK OPTION           00382001
0003B6 D203 4000 2554 00000 00554     424          MVC   0(4,R4),PTRN203        PATTERN FOR MSG 203             00383001
0003BC 4144 0004              00004   425          LA    R4,4(R4)               POINTER TO NEXT FREE ENTRY      00384001
                                      426          DROP  R9                                                     00385001
                                      427 *                                                                     00386001
0003C0 45E0 23D6              003D6   428 TSTIN    BAL   R14,TSTDCBRT           DCB ADDR FOR SYSIN IS IN REG 7  00387001
0003C4 187A                           429          LR    R7,R10                 TEST SYSUT1                     00388001
0003C6 45E0 23D6              003D6   430          BAL   R14,TSTDCBRT                                           00389001
0003CA 187B                           431          LR    R7,R11                 TEST SYSUT2                     00390001
0003CC 45E0 23D6              003D6   432          BAL   R14,TSTDCBRT                                           00391001
0003D0 187C                           433          LR    R7,R12                 TEST SYSUT3                     00392001
                                      434 *                                                                     00393001
                                      435 *        ENTRY IF SYSPRINT NOT OPENED                                 00394001
                                      436 *                                                                     00395001
0003D2 41E0 23F2              003F2   437 ERROR201 LA    R14,STPOINTR           DO NOT RETURN                   00396001
                  R:7  00000          438          USING IHADCB,R7                                              00397001
0003D6 9110 7030        00030         439 TSTDCBRT TM    DCBOFLGS,DCBOFOPN      DCB OPENED ?                    00398001
0003DA 071E                           440          BOR   R14                    YES, RETURN                     00399001
0003DC D203 4000 254C 00000 0054C     441          MVC   0(4,R4),PTRN201        PATTERN FOR MSG 201             00400001
0003E2 D207 4004 7028 00004 00028     442          MVC   4(8,R4),DCBDDNAM       MOVE DDNAME INTO MSG            00401001
0003E8 4144 000C              0000C   443          LA    R4,12(R4)              UPDATE POINTER                  00402001
0003EC 9601 D081        00081         444          OI    COMPFLGS+1,NOGO        SET NOGO SWITCH ON              00403001
0003F0 07FE                           445          BR    R14                    RETURN                          00404001
                                      446 *                                                                     00405001
                                      447          DROP  R7                                                     00406001
0003F2 5040 D0C0              000C0   448 STPOINTR ST    R4,NEXTERR                                             00407001
                                      449 *                                                                     00408001
                                      450 *        END OF INITIALIZATION OF THE COMPILER                        00409001
                                      451 *        GOTO SCAN 1/2 OR TO PHASE 21 FOR ERROR EDITING IF            00410001
                                      452 *        COMPILATION IS IMPOSSIBLE                                    00411001
                                      453 *                                                                     00412001
0003F6 9101 D081        00081         454          TM    COMPFLGS+1,NOGO                                        00413001
0003FA 4710 246A              0046A   455          BO    GOTOEDIT               IF COMPILATION IMPOSSIBLE       00414001
0003FE 5820 250C              0050C   456          L     R2,=A(IEX10001)                                        00415001
000402 07F2                           457          BR    R2                     TO INITIALIZE IEX11             00416001
                                      458 *                                                                     00417001
                                      459 *        DCB EXIT ROUTINES                                            00418001
                                      460 *                                                                     00419001
                  R:1  00000          461          USING IHADCB,R1                                              00420001
                                      462 *                                                                     00421001
                                      463 *        SYSIN OPEN EXIT                                              00422001
                                      464 *                                                                     00423001
000404 4860 103E              0003E   465 INEXRT   LH    R6,DCBBLKSI            GET BLKSIZE                     00424001
000408 1266                           466          LTR   R6,R6                  VALUE PROVIDED ?                00425001
00040A 077E                           467          BNZR  R14                    YES, RETURN                     00426001
00040C D201 103E 1052 0003E 00052     468          MVC   DCBBLKSI,DCBLRECL      NO, SET BLKSIZE TO LRECL        00427001
000412 07FE                           469          BR    R14                    RETURN                          00428001
                                      470 *                                                                     00429001
                                      471 *        SYSLIN OPEN EXIT                                             00430001
                                      472 *                                                                     00431001
000414 4860 103E              0003E   473 LINEXRT  LH    R6,DCBBLKSI            GET BLKSIZE                     00432001
000418 1266                           474          LTR   R6,R6                  VALUE PROVIDED ?                00433001
00041A 077E                           475          BNZR  R14                    YES, RETURN                     00434001
00041C 4160 0C80              00C80   476          LA    R6,3200                SET A DEFAULT OF 3200           00435001
000420 4060 103E              0003E   477          STH   R6,DCBBLKSI            UPDATE BLKSIZE                  00436001
000424 07FE                           478          BR    R14                    RETURN                          00437001
                                      479 *                                                                     00438001
```

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  Active USINGs: IHADCB,R1  WORKAREA,R13  IEX10000,R2

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                    480 *        SYSPUNCH OPEN EXIT                                          00439001
                                    481 *                                                                    00440001
000426 4860 103E            0003E   482 PCHEXRT  LH    R6,DCBBLKSI            GET BLKSIZE                    00441001
00042A 1266                         483          LTR   R6,R6                  VALUE PROVIDED ?               00442001
00042C 077E                         484          BNZR  R14                    YES, RETURN                    00443001
00042E D201 103E 1052 0003E 00052   485          MVC   DCBBLKSI,DCBLRECL      NO, SET BLKSIZE TO LRECL       00444001
000434 07FE                         486          BR    R14                    RETURN                         00445001
                                    487 *                                                                    00446001
                                    488 *        SYSPRINT OPEN EXIT                                          00447001
                                    489 *                                                                    00448001
000436 4860 103E            0003E   490 PRTEXRT  LH    R6,DCBBLKSI            GET BLKSIZE                    00449001
00043A 1266                         491          LTR   R6,R6                  VALUE PROVIDED ?               00450001
00043C 077E                         492          BNZR  R14                    YES, RETURN                    00451001
00043E D201 103E 1052 0003E 00052   493          MVC   DCBBLKSI,DCBLRECL      NO, SET BLKSIZE TO LRECL       00452001
000444 07FE                         494          BR    R14                    RETURN                         00453001
                                    495 *                                                                    00454001
                                    496          DROP  R1                                                    00455001
                                    497 *                                                                    00456001
                                    498 *        ERROR ROUTINES                                              00457001
                                    499 *                                                                    00458001
                                    500 *        ROUTINE FOR UNEXPECTED ERROR DURING OPEN                    00459001
                                    501 *        ENTERED VIA ERET                                            00460001
                                    502 *                                                                    00461001
000446 9601 D081      00081         503 OPEXERR  OI    COMPFLGS+1,NOGO                                       00462001
00044A 07FE                         504          BR    R14                    GO BACK TO OPEN ROUTINE        00463001
                                    505 *                                                                    00464001
                                    506          DROP  R2                                                    00465001
                                    507 *                                                                    00466001
                                    508 *        EXIT TO TERMINATING PHASE IF ERROR EDITING NOT POSSIBLE     00467001
                                    509 *                                                                    00468001
00044C 0520                         510 GOTOTERM BALR  R2,0                                                  00469001
                  R:2  0044E        511          USING *,R2                                                  00470001
00044E 4540 203C            0048A   512          BAL   R4,CLOSE                                              00471001
                                    513 *                                                                    00472001
                                    514          XCTL  EP=IEX51002            GO TO TERMINATING PHASE        00473001
000452 0700                         515+         CNOP  0,4                                                   02-IHBIN
000454 45F0 201A            00468   516+         BAL   15,*+20           BRANCH AROUND CONSTANTS             02-IHBIN
000458 00000460                     517+         DC    A(*+8)            ADDR. OF PARM. LIST                 02-IHBIN
00045C 00000000                     518+         DC    A(0)               DCB ADDRESS PARAMETER              02-IHBIN
000460 C9C5E7F5F1F0F0F2             519+         DC    CL8'IEX51002'      EP PARAMETER                       02-IHBIN
000468 0A07                         520+         SVC   7                              ISSUE XCTL SVC         01-XCTL
                                    521 *                                                                    00474001
                                    522          DROP  R2                                                    00475001
                                    523 *                                                                    00476001
                                    524 *        TERMINATE VIA ERROR EDITING PHASE                           00477001
                                    525 *                                                                    00478001
00046A 0520                         526 GOTOEDIT BALR  R2,0                                                  00479001
                  R:2  0046C        527          USING *,R2                                                  00480001
00046C 4540 201E            0048A   528          BAL   R4,CLOSE                                              00481001
000470 9608 D080      00080         529          OI    COMPFLGS,TERR          INDICATE TERMINATING ERROR     00482001
                                    530 *                                                                    00483001
                                    531          XCTL  EP=IEX21000            GO TO EDIT PHASE               00484001
000474                              532+         CNOP  0,4                                                   02-IHBIN
000474 45F0 201C            00488   533+         BAL   15,*+20           BRANCH AROUND CONSTANTS             02-IHBIN
000478 00000480                     534+         DC    A(*+8)            ADDR. OF PARM. LIST                 02-IHBIN
00047C 00000000                     535+         DC    A(0)               DCB ADDRESS PARAMETER              02-IHBIN
000480 C9C5E7F2F1F0F0F0             536+         DC    CL8'IEX21000'      EP PARAMETER                       02-IHBIN
000488 0A07                         537+         SVC   7                              ISSUE XCTL SVC         01-XCTL
                                    538 *                                                                    00485001
                                    539          DROP  R2                                                    00486001
                                    540 *                                                                    00487001
                                    541 *        SUBROUTINE FOR CLOSING SYSIN AND SYSUT1                     00488001
                                    542 *                                                                    00489001
00048A 0530                         543 CLOSE    BALR  R3,0                                                  00490001
                  R:3  0048C        544          USING *,R3                                                  00491001
00048C 5860 D058            00058   545          L     R6,ASYSDCB             R6 -> SYSIN DCB                00492001
                  R:6  00000        546          USING IHADCB,R6                                             00493001
000490 9110 6030      00030         547          TM    DCBOFLGS,DCBOFOPN      OPEN SUCCESFULLY ?             00494001
                                    548          DROP  R6                                                    00495001
000494 4710 3010            0049C   549          BO    *+8                    YES, BRANCH                    00496001
000498 96F0 302F      004BB         550          OI    SWITCH+1,X'F0'         NO, SYSIN NOT OPENED           00497001
00049C 5870 D064            00064   551          L     R7,AUT1DCB             R7 -> SYSUT1 DCB               00498001
                                    552 *                                                                    00499001
                                    553          CLOSE ((6),,(7))             CLOSE SYSIN AND SYSUT1         00500001
0004A0                              554+         CNOP  0,4                            ALIGN LIST TO FULLWORD 01-CLOSE
0004A0 4510 3020            004AC   555+         BAL   1,*+12                         LOAD REG1 W/LIST ADDR  01-CLOSE
0004A4 00000000                     556+         DC    A(0)                           OPTION AND DCB ADDRESS 01-CLOSE
0004A8 00000000                     557+         DC    A(0)                           OPTION AND DCB ADDRESS 01-CLOSE
0004AC 5061 0000            00000   558+         ST    6,0(1,0)                       STORE DCB ADDRESS      01-CLOSE
0004B0 5071 0004            00004   559+         ST    7,4(1,0)                       STORE DCB ADDRESS      01-CLOSE
0004B4 9280 1004      00004         560+         MVI   4(1),128                       MOVE IN OPTION BYTE    01-CLOSE
0004B8 0A14                         561+         SVC   20                             ISSUE CLOSE SVC        01-CLOSE
                                    562 *                                                                    00501001
0004BA 0704                         563 SWITCH   NOPR  R4                     RETURN IF SYSIN NOT OPENED     00502001
                                    564 *                                                                    00503001
                                    565          FREEPOOL (R6)                FREE SYSIN BUFFER              00504001
0004BC 1816                         566+         LR    1,R6                           LOAD PARAMETER REG 1   02-IHBIN
0004BE 58F0 1014            00014   567+         L     15,20(0,1)             LOAD BUFCB ADDRESS             01-FREEP
0004C2 9601 1017      00017         568+         OI    23(1),1                INDICATE NO BUFCB ADDR         01-FREEP
0004C6 1BEE                         569+         SR    14,14                  CLEAR REGISTER                 01-FREEP
0004C8 1B11                         570+         SR    1,1                    CLEAR REGISTER        @ZA79785 01-FREEP
0004CA BF13 F006            00006   571+         ICM   1,3,6(15)              LOAD LENGTH OF BUFFERS @ZA86199 01-FREEP
0004CE 43E0 F005            00005   572+         IC    14,5(0,15)             NUMBER OF BUFFERS     @ZA79785 01-FREEP
0004D2 1C0E                         573+         MR    0,14                   AREA TO BE FREED      @ZA79785 01-FREEP
0004D4 4110 1008            00008   574+         LA    1,8(0,1)               ACCOUNT FOR BCB       @ZA86199 01-FREEP
0004D8 9140 F004      00004         575+         TM    4(15),X'40'            IS BUFCB 16 BYTES      @ZA19719 01-FREEP
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12

0004DC 47E0 3058            004E4   576+         BNO   *+8                     BRANCH IF BUFCB = 8 BYTES         01-FREEP
0004E0 4110 1008            00008   577+         LA    1,8(0,1)                ADJUST SIZE PLUS 8       @ZA87508 01-FREEP
0004E4 1801                         578+         LR    0,1                     LOAD LENGTH TO BE FREED @ZA86199 01-FREEP
0004E6 4110 F000            00000   579+         LA    1,0(0,15)               LOAD AREA ADDRESS                 01-FREEP
0004EA 0A0A                         580+         SVC   10                      ISSUE FREEMAIN SVC                01-FREEP
                                    581 *                                                                        00505001
0004EC 07F4                         582          BR    R4                      RETURN                            00506001
                                    583 *                                                                        00507001
                                    584          DROP  R3                                                        00508001
                                    585 *                                                                        00509001
0004F0                              586          LTORG                                                           00510001
0004F0 0000000000000000             587                =XL8'00'
0004F8 0000044C                     588                =A(GOTOTERM)
0004FC 0000B000                     589                =F'45056'
000500 00000050                     590                =F'80'
000504 00000446                     591                =A(OPEXERR)
000508 0000046A                     592                =A(GOTOEDIT)
00050C 00000818                     593                =A(IEX10001)
000510 0001                         594                =H'1'
000512 0007                         595                =H'7'
000514 0008                         596                =H'8'
000516 0018                         597                =H'24'
000518 E2C9E9C57E                   598                =C'SIZE='
00051D 000530                       599                =AL3(LINEX)
000520 00052C                       600                =AL3(INEX)
000523 000538                       601                =AL3(PRINTEX)
000526 000534                       602                =AL3(PCHEX)
                                    603 *                                                                        00511001
                                    604 *        DCB EXIT LIST FOR SYSIN, SYSLIN, SYSPUNCH AND SYSPRINT          00512001
                                    605 *                                                                        00513001
000529 000000
00052C                              606          DC    0F'0'                                                     00514001
00052C 85000404                     607 INEX     DC    X'85',AL3(INEXRT)                                         00515001
000530 85000414                     608 LINEX    DC    X'85',AL3(LINEXRT)                                        00516001
000534 85000426                     609 PCHEX    DC    X'85',AL3(PCHEXRT)                                        00517001
000538 85000436                     610 PRINTEX  DC    X'85',AL3(PRTEXRT)                                        00518001
                                    611 *                                                                        00519001
                                    612 *                                                                        00520001
                                    613 *        PATTERNS FOR THE ERROR MESSAGES OF THE INITIALIZATION           00521001
                                    614 *        PHASE                                                           00522001
                                    615 *                                                                        00523001
                                    616 *        W OPTION PARAMETER ... IS INVALID. THE PARAMETER IS             00524001
                                    617 *        DISREGARDED                                                     00525001
                                    618 *                                                                        00526001
00053C 90C8000040404040             619 PTRN200  DC    AL1(128+16,200),AL2(0),CL12' '                            00527001
                                    620 *                                                                        00528001
                                    621 *        T DD CARD FOR ... IS INCORRECT OR MISSING                       00529001
                                    622 *                                                                        00530001
00054C 8CC90000                     623 PTRN201  DC    AL1(128+12,201),AL2(0)                                    00531001
                                    624 *                                                                        00532001
                                    625 *        W DD CARD FOR SYSLIN IS INCORRECT OR MISSING. OPTION            00533001
                                    626 *        NOLOAD IS ASSUMED                                               00534001
                                    627 *                                                                        00535001
000550 84CA0000                     628 PTRN202  DC    AL1(128+4,202),AL2(0)                                     00536001
                                    629 *                                                                        00537001
                                    630 *        W DD CARD FOR SYSPUNCH IS INCORRECT OF MISSING. OPTION          00538001
                                    631 *        NODECK IS ASSUMED                                               00539001
                                    632 *                                                                        00540001
000554 84CB0000                     633 PTRN203  DC    AL1(128+4,203),AL2(0)                                     00541001
                                    634 *                                                                        00542001
                                    635 *        T BLOCKSIZE SPECIFIED FOR SYSIN IS INCORRECT                    00543001
                                    636 *                                                                        00544001
000558 84CC0000                     637 PTRN204  DC     AL1(128+4,204),AL2(0)                                    00545001
                                    638 *                                                                        00546001
                                    639 *        W BLOCKSIZE SPECIFIED FOR ... IS INCORRECT. UNBLOCKED           00547001
                                    640 *        OUTPUT IS GENERATED INSTEAD                                     00548001
                                    641 *                                                                        00549001
00055C 8CCD0000E2E8E2D3             642 PTRN205A DC    AL1(128+12,205),AL2(0),CL8'SYSLIN'                        00550001
000568 8CCD0000E2E8E2D7             643 PTRN205B DC    AL1(128+12,205),AL2(0),CL8'SYSPUNCH'                      00551001
000574 8CCD0000E2E8E2D7             644 PTRN205C DC    AL1(128+12,205),AL2(0),CL8'SYSPRINT'                      00552001
                                    645 *                                                                        00553001
                                    646 *        W INCORRECT PARAMETER FIELD. NO OPTION PARAMETERS ARE           00554001
                                    647 *        HANDLED ANY MORE                                                00555001
                                    648 *                                                                        00556001
000580 84CE0000                     649 PTRN206  DC    AL1(128+4,206),AL2(0)                                     00557001
                                    650 *                                                                        00558001
                                    651 *        W POSSIBLE ERROR IN DD NAMES PARAMETER                          00559001
                                    652 *                                                                        00560001
000584 84CF0000                     653 PTRN207  DC    AL1(128+4,207),AL2(0)                                     00561001
                                    654 *                                                                        00562001
                                    655 *        T SIZE PARAMERER IS INCORRECT. MINIMUM STORAGE SIZE FOR         00563001
                                    656 *        ALGOL F COMPILER IS 45056 BYTES                                 00564001
                                    657 *                                                                        00565001
000588 84D00000                     658 PTRN208  DC   AL1(128+4,208),AL2(0)                                      00566001
                                    659 *                                                                        00567001
                                    660 *        FIRST LINE OF PRINTED OUTPUT                                    00568001
                                    661 *                                                                        00569001
00058C 4040404040404040             662 HEADING  DC    CL121' '                HEADING LINE                      00570001
000605                00605 0058C   663          ORG   HEADING                                                   00571001
00058C F1                           664          DC    C'1'                    ASA CNTL                          00572001
00058D F3F6F0E260C1D360             665          DC    C'360S-AL-531 LEVEL 2.1'  IDENTIFY UPDATED SOURCE         00573001
0005A2 4040404040404040             666          DC    C'          OS ALGOL F'                                   00574001
0005B6                005B6 005E3   667          ORG   HEADING+87                                                00575001
0005E3 C4C4                         668 HEADDAY  DC    C'DD'                                     |               00576001
0005E5 40                           669          DC    C' '                                      |               00577001
0005E6 D4D4D4                       670 HEADMON  DC    C'MMM'                  ALPHA 3 CHAR MONTH |               00578001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

0005E9 40                            671            DC    C' '                                |       00579001
0005EA F2F0E7E7                      672 HEADYEAR DC    C'20XX'                             |       00580001
0005EE 4021217A21217A21              673 HEADTIME DC    XL9'4021217A21217A2121'  PATTERN FOR TIME   |       00581001
0005F7 404040404040                  674            DC    C'      '                           |       00582001
0005FD D7C1C7C5404040F1              675 HEADPAGE DC    C'PAGE    1'                        |       00583001
000605                   00605 00605 676            ORG   ,                                   V       00584001
                                     677 *                                                            00585001
                                     678 *          TABLE OF OPTION PARAMETERS                        00586001
                                     679 *                                                            00587001
000605 06                            680 PARMLIST DC    AL1(6)               (LENGTH-1) OF PARAM     00588001
000606 D7D9D6C7D9C1D440              681            DC    CL9'PROGRAM'         PARAMETER               00589001
00060F 00
000610 94FB D080       00080         682            NI    COMPFLGS,PGR         SET SWITCH IN COMPFLGS  00590001
000614 08                            683 LENGTH   DC    AL1(8)                                       00591001
000615 D7D9D6C3C5C4E4D9              684 PARAM    DC    CL9'PROCEDURE'                               00592001
00061E 9604 D080       00080         685 INSTR    OI    COMPFLGS,PROC                                00593001
000622 04                            686            DC    AL1(4)                                       00594001
000623 E2C8D6D9E3404040              687            DC    CL9'SHORT'                                   00595001
00062C 94FD D080       00080         688            NI    COMPFLGS,SHRT                                00596001
000630 03                            689            DC    AL1(3)                                       00597001
000631 D3D6D5C740404040              690            DC    CL9'LONG'                                    00598001
00063A 9602 D080       00080         691            OI    COMPFLGS,LNG                                 00599001
00063E 05                            692            DC    AL1(5)                                       00600001
00063F E2D6E4D9C3C54040              693            DC    CL9'SOURCE'                                  00601001
000648 947F D081       00081         694            NI    COMPFLGS+1,SRCE                              00602001
00064C 07                            695            DC    AL1(7)                                       00603001
00064D D5D6E2D6E4D9C3C5              696            DC    CL9'NOSOURCE'                                00604001
000656 9680 D081       00081         697            OI    COMPFLGS+1,NSRCE                             00605001
00065A 03                            698            DC    AL1(3)                                       00606001
00065B D3D6C1C440404040              699            DC    CL9'LOAD'                                    00607001
000664 94BF D081       00081         700            NI    COMPFLGS+1,LOAD                              00608001
000668 05                            701            DC    AL1(5)                                       00609001
000669 D5D6D3D6C1C44040              702            DC    CL9'NOLOAD'                                  00610001
000672 9640 D081       00081         703            OI    COMPFLGS+1,NLOAD                             00611001
000676 03                            704            DC    AL1(3)                                       00612001
000677 C4C5C3D240404040              705            DC    CL9'DECK'                                    00613001
000680 94DF D081       00081         706            NI    COMPFLGS+1,DECK                              00614001
000684 05                            707            DC    AL1(5)                                       00615001
000685 D5D6C4C5C3D24040              708            DC    CL9'NODECK'                                  00616001
00068E 9620 D081       00081         709            OI    COMPFLGS+1,NDECK                             00617001
000692 05                            710            DC    AL1(5)                                       00618001
000693 C5C2C3C4C9C34040              711            DC    CL9'EBCDIC'                                  00619001
00069C 94EF D081       00081         712            NI    COMPFLGS+1,EBCDIC                            00620001
0006A0 05                            713            DC    AL1(5)                                       00621001
0006A1 D5D6E3C5E2E34040              714            DC    CL9'NOTEST'                                  00622001
0006AA 9604 D082       00082         715            OI    COMPFLGS+2,NOTEST                            00623001
0006AE 03                            716            DC    AL1(3)                                       00624001
0006AF E3C5E2E340404040              717            DC    CL9'TEST'                                    00625001
0006B8 94FB D082       00082         718            NI    COMPFLGS+2,TEST                              00626001
0006BC 02                            719            DC    AL1(2)                                       00627001
0006BD C9E2D64040404040              720            DC    CL9'ISO'                                     00628001
0006C6 9610 D081       00081         721            OI    COMPFLGS+1,ISO                               00629001
0006CA 01                            722            DC    AL1(1)                                       00630001
0006CB D5E2404040404040              723            DC    CL9'NS'                                      00631001
0006D4 9680 D081       00081         724            OI    COMPFLGS+1,NSRCE                             00632001
0006D8 01                            725            DC    AL1(1)                                       00633001
0006D9 D5C4404040404040              726            DC    CL9'ND'                                      00634001
0006E2 9620 D081       00081         727            OI    COMPFLGS+1,NDECK                             00635001
0006E6 01                            728            DC    AL1(1)                                       00636001
0006E7 D5D3404040404040              729            DC    CL9'NL'                                      00637001
0006F0 9640 D081       00081         730            OI    COMPFLGS+1,NLOAD                             00638001
0006F4 01                            731            DC    AL1(1)                                       00639001
0006F5 C5C2404040404040              732            DC    CL9'EB'                                      00640001
0006FE 94EF D081       00081         733            NI    COMPFLGS+1,EBCDIC                            00641001
000702 01                            734            DC    AL1(1)                                       00642001
000703 D7C7404040404040              735            DC    CL9'PG'                                      00643001
00070C 94FB D080       00080         736            NI    COMPFLGS,PGR                                 00644001
000710 01                            737            DC    AL1(1)                                       00645001
000711 D7C3404040404040              738            DC    CL9'PC'                                      00646001
00071A 9604 D080       00080         739            OI    COMPFLGS,PROC                                00647001
00071E 01                            740            DC    AL1(1)                                       00648001
00071F D5E3404040404040              741            DC    CL9'NT'                                      00649001
000728 9604 D082       00082         742            OI    COMPFLGS+2,NOTEST                            00650001
00072C 01                            743            DC    AL1(1)                                       00651001
00072D E2D7404040404040              744            DC    CL9'SP'                                      00652001
000736 94FD D080       00080         745            NI    COMPFLGS,SHRT                                00653001
00073A 01                            746            DC    AL1(1)                                       00654001
00073B D3D7404040404040              747            DC    CL9'LP'                                      00655001
000744 9602 D080       00080         748            OI    COMPFLGS,LNG                                 00656001
000748 00                            749            DC    AL1(0)                                       00657001
000749 C440404040404040              750            DC    CL9'D'                                       00658001
000752 94DF D081       00081         751            NI    COMPFLGS+1,DECK                              00659001
000756 00                            752            DC    AL1(0)                                       00660001
000757 C940404040404040              753            DC    CL9'I'                                       00661001
000760 9610 D081       00081         754            OI    COMPFLGS+1,ISO                               00662001
000764 00                            755            DC    AL1(0)                                       00663001
000765 D340404040404040              756            DC    CL9'L'                                       00664001
00076E 94BF D081       00081         757            NI    COMPFLGS+1,LOAD                              00665001
000772 00                            758            DC    AL1(0)                                       00666001
000773 E240404040404040              759            DC    CL9'S'                                       00667001
00077C 947F D081       00081         760            NI    COMPFLGS+1,SRCE                              00668001
000780 00                            761 LSTENTRY DC    AL1(0)                                       00669001
000781 E340404040404040              762            DC    CL9'T'                                       00670001
00078A 94FB D082       00082         763            NI    COMPFLGS+2,TEST                              00671001
                                     764 *                                                            00672001
                                     765 *          WORKSPACE FOR TRANSLATING THE SIZE PARAMETER AND THE  00673001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                    766 *         ACTUAL DATE                                              00674001
                                    767 *                                                                  00675001
00078E 0000
000790                              768         DC    0D'0'                                                00676001
000790 000000000000000C             769 FIELD1  DC    PL8'0'                                               00677001
                                    770 *                                                                  00678001
000798 00000000                     771 TEMP    DC    F'0'              TEMP WORK SLOT                     00679001
00079C 00000000
0007A0 0000000000000000             772 TEMP1   DC    D'0'              WORK SPACE FOR DEC TO BIN CONV     00680001
0007A8 00000000                     773 TEMP2   DC    F'0'              TEMP WORK SLOT                     00681001
0007AC 00000000                     774 TEMP3   DC    F'0'              TEMPORARY WORK SPACE               00682001
                                    775 *                                                                  00683001
                                    776 *         TABLE OF THE MONTH NAMES AND THE NUMBER OF DAYS          00684001
                                    777 *                                                                  00685001
0007B0 001F                         778 MNTHTBL DC    H'31'             JAN DAYS IN MONTH                  00686001
0007B2 D1C1D540                     779         DC    C'JAN '               3 CHAR MONTH CODE              00687001
0007B6 F0F1                         780         DC    C'01'                 MONTH NUMBER                   00688001
0007B8 001D                         781         DC    H'29'             FEB                                00689001
0007BA C6C5C240                     782         DC    C'FEB '                                              00690001
0007BE F0F2                         783         DC    C'02'                                                00691001
0007C0 001F                         784         DC    H'31'             MAR                                00692001
0007C2 D4C1D940                     785         DC    C'MAR '                                              00693001
0007C6 F0F3                         786         DC    C'03'                                                00694001
0007C8 001E                         787         DC    H'30'             APR                                00695001
0007CA C1D7D940                     788         DC    C'APR '                                              00696001
0007CE F0F4                         789         DC    C'04'                                                00697001
0007D0 001F                         790         DC    H'31'             MAY                                00698001
0007D2 D4C1E840                     791         DC    C'MAY '                                              00699001
0007D6 F0F5                         792         DC    C'05'                                                00700001
0007D8 001E                         793         DC    H'30'             JUN                                00701001
0007DA D1E4D540                     794         DC    C'JUN '                                              00702001
0007DE F0F6                         795         DC    C'06'                                                00703001
0007E0 001F                         796         DC    H'31'             JUL                                00704001
0007E2 D1E4D340                     797         DC    C'JUL '                                              00705001
0007E6 F0F7                         798         DC    C'07'                                                00706001
0007E8 001F                         799         DC    H'31'             AUG                                00707001
0007EA C1E4C740                     800         DC    C'AUG '                                              00708001
0007EE F0F8                         801         DC    C'08'                                                00709001
0007F0 001E                         802         DC    H'30'             SEP                                00710001
0007F2 E2C5D740                     803         DC    C'SEP '                                              00711001
0007F6 F0F9                         804         DC    C'09'                                                00712001
0007F8 001F                         805         DC    H'31'             OCT                                00713001
0007FA D6C3E340                     806         DC    C'OCT '                                              00714001
0007FE F1F0                         807         DC    C'10'                                                00715001
000800 001E                         808         DC    H'30'             NOV                                00716001
000802 D5D6E540                     809         DC    C'NOV '                                              00717001
000806 F1F1                         810         DC    C'11'                                                00718001
000808 00FF                         811         DC    H'255'            DEC (ALLOW FOR STUPID DDD)         00719001
00080A C4C5C340                     812         DC    C'DEC '                                              00720001
00080E F1F2                         813         DC    C'12'                                                00721001
                                    814 *                                                                  00722001
000810 003C                         815 H60     DC    H'60'                                                00723001
                                    816 *                                                                  00724001
000818               00818 00016    817 IEX10001 CSECT                                                     00725001
                                    818 *                                                                  00726001
                 R:2  00818         819         USING IEX10001,R2                                          00727001
                                    820 *                                                                  00728001
                                    821 *         INSTRUCTIONS FOR INITIALIZING IEX11 CAN BE INSERTED HERE 00729001
                                    822 *                                                                  00730001
                                    823         XCTL  EP=IEX11000           EXIT TO NEXT PHASE             00731001
000818                              824+        CNOP  0,4                                                  02-IHBIN
000818 45F0 2014            0082C   825+        BAL   15,*+20           BRANCH AROUND CONSTANTS            02-IHBIN
00081C 00000824                     826+        DC    A(*+8)            ADDR. OF PARM. LIST                02-IHBIN
000820 00000000                     827+        DC    A(0)               DCB ADDRESS PARAMETER             02-IHBIN
000824 C9C5E7F1F1F0F0F0             828+        DC    CL8'IEX11000'      EP PARAMETER                      02-IHBIN
00082C 0A07                         829+        SVC   7                               ISSUE XCTL SVC       01-XCTL
                                    830 *                                                                  00732001
                                    831 *         DUMMY CONTROL SECTION TO PROVIDE ADRESSABILITY OF DCB    00733001
                                    832 *                                                                  00734001
                                    833         PRINT NOGEN                                                00735001
                                    834 *                                                                  00736001
                                    835         DCBD  DSORG=(PS),DEVD=(DA)                                 00737001
                                   1393 *                                                                  00738001
                                   1394         PRINT GEN                                                  00739001
                                   1395 *                                                                  00740001
000000               00000 00CB6   1396 WORKAREA DSECT                                                     00741001
                                   1397 *                                                                  00742001
                                   1398         COPY  WORKAREA                                             00743001
                                   1399=*                                                                  00001001
                                   1400=*         WORKAREA - MAPPING CSECT IEX00001                        00002001
                                   1401=*                                                                  00003001
                                   1402=*         ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT 00004001
                                   1403=*                                                                  00005001
000000 0000000000000000            1404=SAVEAREA DC    18F'0'                                              00006001
                                   1405=*                                                                  00007001
                                   1406=*         DCB ADDRS                                                00008001
                                   1407=*                                                                  00009001
000048                             1408=DCBTABLE DC    0F'0'                                               00010001
000048 00000000                    1409=ALINDCB DC    A(0)                                                 00011001
00004C 00000000                    1410=        DC    A(0)                                                 00012001
000050 00000000                    1411=        DC    A(0)                                                 00013001
000054 00000000                    1412=        DC    A(0)                                                 00014001
000058 00000000                    1413=ASYSDCB DC    A(0)                                                 00015001
00005C 00000000                    1414=APRTDCB DC    A(0)                                                 00016001
000060 00000000                    1415=APCHDCB DC    A(0)                                                 00017001
000064 00000000                    1416=AUT1DCB DC    A(0)                                                 00018001
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

000068 00000000                    1417=AUT2DCB  DC    A(0)                                                     00019001
00006C 00000000                    1418=AUT3DCB  DC    A(0)                                                     00020001
                                   1419=*                                                                       00021001
                                   1420=*        END OF DATA EXIT ADDRS                                         00022001
                                   1421=*                                                                       00023001
000070 00000000                    1422=EODUT1   DC    A(0)                    SYSUT1                           00024001
000074 00000000                    1423=EODUT2   DC    A(0)                    SYSUT2                           00025001
000078 00000000                    1424=EODUT3   DC    A(0)                    SYSUT3                           00026001
00007C 00000000                    1425=EODIN    DC    A(0)                    SYSIN                            00027001
                                   1426=*                                                                       00028001
                                   1427=*        OPTION SWITCHES IN COMPFLGS                                    00029001
                                   1428=*                                                                       00030001
                                   1429=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -                  00031001
                                   1430=*                                                                       00032001
                                   1431=*        PURPOSE                   POSITION                             00033001
                                   1432=*                                  BYTE 1    BYTE 2    BYTE 3           00034001
                                   1433=*                                  01234567  01234567  01234567         00035001
                                   1434=*                                                                       00036001
                                   1435=*        COMPMODE (SYNTAX CHECK)   X                                    00037001
                                   1436=*        SUBSCRIPT OPTIMIZATION     X                                   00038001
                                   1437=*        WARNING ERROR               X                                  00039001
                                   1438=*        SERIOUS ERROR                X                                 00040001
                                   1439=*        TERMINATING ERROR             X                                00041001
                                   1440=*        PROCEDURE/PROGRAM              X                               00042001
                                   1441=*        LONG/SHORT PRECISION            X                              00043001
                                   1442=*        OPERAND                          X                             00044001
                                   1443=*                                                                       00045001
                                   1444=*        NOSOURCE/SOURCE                     X                          00046001
                                   1445=*        NOLOAD/LOAD                          X                         00047001
                                   1446=*        NODECK/DECK                           X                        00048001
                                   1447=*        ISO/EBCDIC                             X                       00049001
                                   1448=*        PROGRAM INTERRUPT                       X                      00050001
                                   1449=*        TERMINATING PHASE ENTERED                X                     00051001
                                   1450=*        NO BUFFERS ASSIGNED                       X                    00052001
                                   1451=*        NO COMPILATION POSSIBLE                    X                   00053001
                                   1452=*                                                                       00054001
                                   1453=*        SYSPRINT DOWN                                 X                00055001
                                   1454=*        WHOLE SOURCE PROG IN CORE                      X               00056001
                                   1455=*        NO OPTAB                                        X              00057001
                                   1456=*        SYSPRINT NOT OPENED                              X             00058001
                                   1457=*        ERROR UNRELATED TO SEMICOLON NR                   X            00059001
                                   1458=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)     X           00060001
                                   1459=*        60 CHARACTER SET                                    X          00061001
                                   1460=*        (RESERVED)                                           X         00062001
                                   1461=*                                                                       00063001
000080 00220000                    1462=COMPFLGS DC    X'00220000'             PARAMETERS AND SWITCHES          00064001
                                   1463=*                                                                       00065001
                                   1464=*        OPTION SWITCHES IN COMPFLGS                                    00066001
                                   1465=*                                                                       00067001
                      00080        1466=COMPMODE EQU   X'80'                   SYNTAX CHECK MODE                00068001
                      00040        1467=SUBSCOPT EQU   X'40'                   SUBSCRIPT OPTIMIZATION           00069001
                      000FB        1468=PGR      EQU   X'FB'                                                    00070001
                      00004        1469=PROC     EQU   X'04'                   PRECOMPILED PROCEDURE            00071001
                                   1470=*                                                                       00072001
                      000FD        1471=SHRT     EQU   X'FD'                                                    00073001
                      00002        1472=LNG      EQU   X'02'                                                    00074001
                      00001        1473=OPERAND  EQU   X'01'                                                    00075001
                                   1474=*                                                                       00076001
                                   1475=*        ERROR SEVERITY INDICATORS IN COMPFLGS                          00077001
                                   1476=*                                                                       00078001
                      00020        1477=WERR     EQU   X'20'                   WARNING ERROR                    00079001
                      00010        1478=SERR     EQU   X'10'                   SERIOUS ERROR                    00080001
                      00008        1479=TERR     EQU   X'08'                   TERMINATING ERROR                00081001
                                   1480=*                                                                       00082001
                                   1481=*        OPTION SWITCHES IN COMPFLGS+1                                  00083001
                                   1482=*                                                                       00084001
                      0007F        1483=SRCE     EQU   X'7F'                                                    00085001
                      00080        1484=NSRCE    EQU   X'80'                                                    00086001
                                   1485=*                                                                       00087001
                      000BF        1486=LOAD     EQU   X'BF'                                                    00088001
                      00040        1487=NLOAD    EQU   X'40'                                                    00089001
                                   1488=*                                                                       00090001
                      000DF        1489=DECK     EQU   X'DF'                                                    00091001
                      00020        1490=NDECK    EQU   X'20'                                                    00092001
                                   1491=*                                                                       00093001
                      000EF        1492=EBCDIC   EQU   X'EF'                                                    00094001
                      00010        1493=ISO      EQU   X'10'                                                    00095001
                                   1494=*                                                                       00096001
                                   1495=*        TERMINATION SWITCHES IN COMPFLGS+1                             00097001
                                   1496=*                                                                       00098001
                      00008        1497=ERR      EQU   X'08'                   PROGRAM INTERRUPT HAS            00099001
                                   1498=*                                      OCCURED IN COMPILER              00100001
                      00004        1499=TERM     EQU   X'04'                   LAST PHASE HAS BEEN ENTERED      00101001
                      00002        1500=NOBUF    EQU   X'02'                   ERROR POOL IS IN WORKAREA        00102001
                                   1501=*                                      NO SCE PROG BUFF 1               00103001
                      00001        1502=NOGO     EQU   X'01'                   COMPILATION NOT POSSIBLE         00104001
                                   1503=*                                      DO NOT START SCAN 1              00105001
                      00003        1504=NOBUNOGO EQU   X'03'                   NOBUF AND NOGO                   00106001
                                   1505=*                                                                       00107001
                                   1506=*        SWITCHES IN COMPFLGS+2                                         00108001
                                   1507=*                                                                       00109001
                      00080        1508=PRT      EQU   X'80'                   SYSPRINT NOT AVAILABLE           00110001
                      00040        1509=SPIC     EQU   X'40'                   SOURCE PROGRAM IN STORAGE        00111001
                      00020        1510=NOPT     EQU   X'20'                   NO SUBSCRIPT OPTIMIZATION        00112001
                      00010        1511=PRTNO    EQU   X'10'                   SYSPRINT NOT OPENED              00113001
                      00008        1512=NOSC     EQU   X'08'                   SEMICOLON COUNTER NOT VALID      00114001
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  Active USINGs: IEX10001,R2  WORKAREA,R13

D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

                                   1513=*                                                                       00115001
                      00004        1514=NOTEST   EQU   X'04'                                                    00116001
                      000FB        1515=TEST     EQU   X'FB'                        EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                   1516=*                                                                       00118001
                      00002        1517=SET60    EQU   X'02'                        60 CHARACTER SET IS TO BE USED  00119001
                                   1518=*                                                                       00120001
                                   1519=*        MISCELLANEOUS CONTROL INFORMATION                              00121001
                                   1520=*                                                                       00122001
000084 0000B000                    1521=SIZE     DC    F'45056'             AVAILABLE MAIN STORAGE - NOT USED    00123001
000088 00000000                    1522=PICAADD  DC    A(0)                 ADDR OF PICA OF THE INVOKER          00124001
00008C 00000000                    1523=HDING    DC    F'0'                 ADDR OF HEADING INFO OF THE INVOKER  00125001
000090 00000000                    1524=ERET     DC    F'0'                 RETURN ADDR FOR PROGRAM              00126001
                                   1525=*                                   AND I/O ERRORS                       00127001
000094 0000000C                    1526=PAGECNT  DC    PL4'0'               PAGE COUNT                           00128001
000098 0000                        1527=LINCNT   DC    H'0'                 COUNTER OF LINES PER PAGE            00129001
00009A 0038                        1528=MAXLINES DC    H'56'                MAX NUMBER OF PRINT LINES PER PAGE   00130001
00009C 0000                        1529=SEMCNT   DC    H'0'                 SEMICOLON COUNTER                    00131001
00009E 0032                        1530=PBN      DC    H'50'                HIGHEST PROGRAM BLOCK NUMBER         00132001
0000A0 0000                        1531=KBN      DC    H'0'                 HIGHEST CONSTANT POOL NUMBER         00133001
                      0001C        1532=LATNR    EQU   28                   NR OF LIBRARY STAND FUNCTIONS        00134001
                      0006C        1533=LATBEG   EQU   4*(LATNR-1)                                               00135001
0000A2 006C                        1534=LN       DC    AL2(LATBEG)          LAST USED DISPLACEMENT IN LAT        00136001
0000A4 00000000                    1535=PRPT     DC    F'0'                 PROGRAM POINTER                      00137001
0000A8 00000000                    1536=SAVOUTA  DC    F'0'                                                      00138001
0000AC                             1537=OUTAREA2 DS    F                    SYSPUNCH SAVE AREA                   00139001
0000B0 40404040                    1538=PIDENT   DC    CL4' '               PROGRAM IDENTIFICATION               00140001
0000B4 0000000C                    1539=CARDCNT  DC    PL4'0'               OBJECT PROGRAM DECK SEQUENCE NUMBER  00141001
0000B8 00000000                    1540=PRTRTADD DC    A(0)                 ADDR OF PRINT ROUTINE                00142001
                                   1541=*                                                                       00143001
                                   1542=*        ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE      00144001
                                   1543=*                                                                       00145001
0000BC 00000278                    1544=ERRPOOL  DC    A(PRELPOOL)          FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                    1545=NEXTERR  DC    A(PRELPOOL)          NEXT FREE PLACE IN ERROR POOL        00147001
0000C4                             1546=ENDPOOL  DS    F                    LAST BYTE OF ERROR POOL-23           00148001
0000C8                             1547=SRCE1ADD DS    F                    SOURCE PROGRAM BUFFER 1              00149001
0000CC                             1548=SRCE1END DS    F                    ADDR OF LAST BYTE+1                  00150001
0000D0                             1549=SULTSTRT DS    F                    ID OF LAST ITAB RECORD               00151001
                                   1550=*                                                                       00152001
                                   1551=*                                                                       00153001
                                   1552=*        TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                    00154001
                                   1553=*                                                                       00155001
0000D4                             1554=INBLKS   DS    H                    MAX BLKSIZE FOR SYSIN     - NOT USED 00156001
0000D6                             1555=PRTBLKS  DS    H                    MAX BLKSIZE SYSPRINT      - NOT USED 00157001
0000D8                             1556=LINBLKS  DS    H                    MAX BLKSIZE FOR SYSLIN    - NOT USED 00158001
0000DA                             1557=PCHBLKS  DS    H                    MAX BLKSIZE FOR SYSPUNCH - NOT USED  00159001
0000DC                             1558=POOLS    DS    F                    SIZE OF ERROR POOL                   00160001
0000E0                             1559=SRCE1S   DS    F                    SIZE OF SOURCE PROG BUFFERS 1 AND 2  00161001
                      000E0        1560=SRCE3S   EQU   SRCE1S               SIZE OF SOURCE PROG BUFFERS 3 AND 4  00162001
0000E4                             1561=ITAB10S  DS    F                    SIZE OF ITAB FOR PHASE 10            00163001
0000E8                             1562=ITAB20S  DS    F                    SIZE OF ITAB FOR PHASE 20            00164001
0000EC                             1563=ITAB30S  DS    F                    SIZE OF ITAB FOR PHASE 30            00165001
0000F0                             1564=CRIDTABS DS    F                    SIZE OF CRIDTAB FOR PHASE 30         00166001
0000F4                             1565=SUTAB30S DS    F                    SIZE OF SUTAB BUFFER OF PHASE 30     00167001
0000F8                             1566=LVTAB30S DS    F                    SIZE OF LVTAB BUFFER FOR PHASE 30    00168001
0000FC                             1567=OPTABS   DS    F                    SIZE OF OPTAB BUFFERS 1 AND 2        00169001
000100                             1568=SUTAB40S DS    F                    SIZE OF SUTAB IN PHASE 40            00170001
000104                             1569=LVTAB40S DS    F                    SIZE OF LVTAB IN PHASE 40            00171001
000108                             1570=OOSTACKS DS    F                    SIZE OF OPERATOR/OPERAND STACK       00172001
                                   1571=*                                                                       00173001
                                   1572=*        AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF           00174001
                                   1573=*        EACH NEW PAGE                                                  00175001
                                   1574=*                                                                       00176001
                      0010C        1575=PAGEHEAD EQU   *                                                         00177001
00010C 4040404040404040            1576=PAGEHD1  DC    CL121' '                  FIRST HEADLINE                  00178001
000185                00185 0010C  1577=         ORG   PAGEHD1                                                   00179001
00010C F1                          1578=PAGEHD1C DC    C'1'                      ASA CNTL                        00180001
00010D 4040404040404040            1579=         DC    CL10' '                   SPACER                          00181001
000117 4040404040404040            1580=PAGEHD1D DC    CL100' '                  PAGE TEXT HEADING               00182001
00017B                0017B 0017D  1581=         ORG   PAGEHD1+113                                               00183001
00017D D7C1C7C5                    1582=PAGEHD1P DC    CL4'PAGE'                 PAGE                            00184001
000181 40404040                    1583=PAGENUMB DC    CL4' '                    PAGE COUNTER                    00185001
000185                00185 00185  1584=         ORG                                                             00186001
                                   1585=*                                                                       00187001
000185 4040404040404040            1586=PAGEHD2  DC    CL121' '                  SECOND HEADLINE                 00188001
0001FE                001FE 00185  1587=         ORG   PAGEHD2                                                   00189001
000185 40                          1588=PAGEHD2C DC    C' '                      ASA CNTL                        00190001
000186 4040404040404040            1589=         DC    CL10' '                   SPACER                          00191001
000190 4040404040404040            1590=PAGEHD2D DC    CL100' '                  PAGE TEXT HEADING               00192001
0001F4                001F4 001FE  1591=         ORG                                                             00193001
                                   1592=*                                                                       00194001
0001FE 4040404040404040            1593=PAGEHD3  DC    CL121' '                  THIRD HEADLINE                  00195001
000277                00277 001FE  1594=         ORG   PAGEHD3                                                   00196001
0001FE 40                          1595=PAGEHD3C DC    C' '                      ASA CNTL                        00197001
0001FF 4040404040404040            1596=         DC    CL10' '                   SPACER                          00198001
000209 4040404040404040            1597=PAGEHD3D DC    CL100' '                  PAGE TEXT HEADING               00199001
00026D                0026D 00277  1598=         ORG                                                             00200001
                                   1599=*                                                                       00201001
                                   1600=*                                                                       00202001
                                   1601=*        END OF STANDARD COMMON AREA                                    00203001
                                   1602=*                                                                       00204001
                      00277        1603=STANDX   EQU   *                                                         00205001
                                   1604=*                                                                       00206001
                                   1605=*        THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL             00207001
                                   1606=*        PHASES AND PARTLY OVERLAY EACH OTHER                           00208001
                                   1607=*                                                                       00209001
                                   1608=*                     NAME OR PURPOSE           NEEDED BY PHASES 00210001
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.12

                                    1609=*                                                                    00211001
000277 00
000278                              1610=          DC    0F'0'                                                00212001
000278 4040404040404040             1611=PRELPOOL  DC    236C' ',20C'X'  PRELIMINARY ERROR POOL     IEX10     00213001
000378                 00378 00416  1612=          ORG   PRELPOOL+414                                         00214001
                                    1613=*                     DCB FOR SYSIN                   11             00215001
                                    1614=SYSIN     DCB   DDNAME=SYSIN,                                        X00216001
                                        =                DSORG=PS,                                            X00217001
                                        =                MACRF=(GM),                                          X00218001
                                        =                RECFM=FB,                                            X00219001
                                        =                LRECL=80,                                            X00220001
                                        =                BFTEK=S                                               00221001


                                    1616+*                     DATA CONTROL BLOCK                             01-DCB
                                    1617+*                                                                    01-DCB
000416 0000
000418                              1618+SYSIN     DC    0F'0'                ORIGIN ON WORD BOUNDARY         01-DCB

                                    1620+*                     DIRECT ACCESS DEVICE INTERFACE                 01-DCB

000418 0000000000000000             1622+          DC    BL16'0'               FDAD,DVTBL                     01-DCB
000428 00000000                     1623+          DC    A(0)                  KEYLE,DEVT,TRBAL               01-DCB

                                    1625+*                     COMMON ACCESS METHOD INTERFACE                 01-DCB

00042C 00                           1627+          DC    AL1(0)               BUFNO                           01-DCB
00042D 000001                       1628+          DC    AL3(1)               BUFCB                           01-DCB
000430 0000                         1629+          DC    AL2(0)          BUFL                                 01-DCB
000432 4000                         1630+          DC    BL2'0100000000000000'          DSORG                 01-DCB
000434 00000001                     1631+          DC    A(1)                  IOBAD                          01-DCB

                                    1633+*                     FOUNDATION EXTENSION                           01-DCB

000438 40                           1635+          DC    BL1'01000000'               BFTEK,BFLN,HIARCHY       01-DCB
000439 000001                       1636+          DC    AL3(1)               EODAD                           01-DCB
00043C 90                           1637+          DC    BL1'10010000'        RECFM                           01-DCB
00043D 000000                       1638+          DC    AL3(0)               EXLST                           01-DCB

                                    1640+*                     FOUNDATION BLOCK                               01-DCB

000440 E2E8E2C9D5404040             1642+          DC    CL8'SYSIN'           DDNAME                          01-DCB
000448 02                           1643+          DC    BL1'00000010'        OFLGS                           01-DCB
000449 00                           1644+          DC    BL1'00000000'                       IFLG             01-DCB
00044A 5000                         1645+          DC    BL2'0101000000000000'   MACR                         01-DCB

                                    1647+*                     BSAM-BPAM-QSAM INTERFACE                       01-DCB

00044C 00                           1649+          DC    BL1'00000000'                                   RER1 01-DCB
00044D 000001                       1650+          DC    AL3(1)               CHECK, GERR, PERR               01-DCB
000450 00000001                     1651+          DC    A(1)                 SYNAD                           01-DCB
000454 0000                         1652+          DC    H'0'                 CIND1, CIND2                    01-DCB
000456 0000                         1653+          DC    AL2(0)               BLKSIZE                         01-DCB
000458 00000000                     1654+          DC    F'0'                 WCPO, WCPL, OFFSR, OFFSW        01-DCB
00045C 00000001                     1655+          DC    A(1)                 IOBA                            01-DCB
000460 00                           1656+          DC    AL1(0)               NCP                             01-DCB
000461 000001                       1657+          DC    AL3(1)               EOBR, EOBAD                     01-DCB

                                    1659+*                          QSAM INTERFACE                            01-DCB

000464 00000001                     1661+          DC    A(1)                  RECAD                          01-DCB
000468 0000                         1662+          DC    H'0'                 QSWS                            01-DCB
00046A 0050                         1663+          DC    AL2(80)         LRECL                                01-DCB
00046C 00                           1664+          DC    BL1'00000000'        EROPT                           01-DCB
00046D 000001                       1665+          DC    AL3(1)               CNTRL                           01-DCB
000470 00000000                     1666+          DC    F'0'                 PRECL                           01-DCB
000474 00000001                     1667+          DC    A(1)                 EOB                             01-DCB
                                    1668=*               SYNAD=SYNAD     (ASSEMBLED IN IEX00001)              00222001
                                    1669=*               EODAD=EODADIN   (INSERTED BY IEX11)                  00223001
000478                 00478 00278  1670=          ORG   PRELPOOL                                             00224001
000278                              1671=PBTAB2    DS    CL510           PROGR. BLOCK TABLE 2          20-50  00225001
000478                              1672=          DS    0F                                                   00226001
000478                              1673=PBTAB1    DS    CL255           PROGR. BLOCK TABLE 1          11-20  00227001
000577                 00577 00478  1674=          ORG   PBTAB1                                               00228001
000478                              1675=FSTAB     DS    CL255           FOR STATEMENT TABLE           30-40  00229001
                                    1676=*                     DCB FOR SYSUT1                  11-30          00230001
                                    1677=SYSUT1    DCB   DDNAME=SYSUT1,                                       X00231001
                                        =                DSORG=PS,                                            X00232001
                                        =                MACRF=(R,W),                                         X00233001
                                        =                RECFM=F                                               00234001


                                    1679+*                     DATA CONTROL BLOCK                             01-DCB
                                    1680+*                                                                    01-DCB
000577 00
000578                              1681+SYSUT1    DC    0F'0'                ORIGIN ON WORD BOUNDARY         01-DCB

                                    1683+*                     DIRECT ACCESS DEVICE INTERFACE                 01-DCB

000578 0000000000000000             1685+          DC    BL16'0'               FDAD,DVTBL                     01-DCB
000588 00000000                     1686+          DC    A(0)                  KEYLE,DEVT,TRBAL               01-DCB

                                    1688+*                     COMMON ACCESS METHOD INTERFACE                 01-DCB

00058C 00                           1690+          DC    AL1(0)               BUFNO                           01-DCB
00058D 000001                       1691+          DC    AL3(1)               BUFCB                           01-DCB
```

```
D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

000590 0000                          1692+         DC    AL2(0)              BUFL                                      01-DCB
000592 4000                          1693+         DC    BL2'0100000000000000'              DSORG                      01-DCB
000594 00000001                      1694+         DC    A(1)                         IOBAD                            01-DCB

                                     1696+*                            FOUNDATION EXTENSION                            01-DCB

000598 00                            1698+         DC    BL1'00000000'                      BFTEK,BFLN,HIARCHY         01-DCB
000599 000001                        1699+         DC    AL3(1)                      EODAD                             01-DCB
00059C 80                            1700+         DC    BL1'10000000'               RECFM                             01-DCB
00059D 000000                        1701+         DC    AL3(0)                      EXLST                             01-DCB

                                     1703+*                            FOUNDATION BLOCK                                01-DCB

0005A0 E2E8E2E4E3F14040              1705+         DC    CL8'SYSUT1'                 DDNAME                            01-DCB
0005A8 02                            1706+         DC    BL1'00000010'               OFLGS                             01-DCB
0005A9 00                            1707+         DC    BL1'00000000'                              IFLG               01-DCB
0005AA 2020                          1708+         DC    BL2'0010000000100000'       MACR                              01-DCB

                                     1710+*                            BSAM-BPAM-QSAM INTERFACE                        01-DCB

0005AC 00                            1712+         DC    BL1'00000000'                                            RER1 01-DCB
0005AD 000001                        1713+         DC    AL3(1)                      CHECK, GERR, PERR                 01-DCB
0005B0 00000001                      1714+         DC    A(1)                        SYNAD                             01-DCB
0005B4 0000                          1715+         DC    H'0'                        CIND1, CIND2                      01-DCB
0005B6 0000                          1716+         DC    AL2(0)                      BLKSIZE                           01-DCB
0005B8 00000000                      1717+         DC    F'0'                        WCPO, WCPL, OFFSR, OFFSW          01-DCB
0005BC 00000001                      1718+         DC    A(1)                        IOBA                              01-DCB
0005C0 00                            1719+         DC    AL1(0)                      NCP                               01-DCB
0005C1 000001                        1720+         DC    AL3(1)                      EOBR, EOBAD                       01-DCB

                                     1722+*                              BSAM-BPAM INTERFACE                           01-DCB

0005C4 00000001                      1724+         DC    A(1)                        EOBW                              01-DCB
0005C8 0000                          1725+         DC    H'0'                        DIRCT                             01-DCB
0005CA 0000                          1726+         DC    AL2(0)             LRECL                                    01-DCB
0005CC 00000001                      1727+         DC    A(1)                        CNTRL, NOTE, POINT                01-DCB
                                     1728=*              SYNAD=SYNAD,       (ASSEMBLED IN IEX00001)                  00235001
                                     1729=*              EODAD=EODAD1                                                  00236001
                                     1730=*                                                                            00237001
0005D0                               1731=         DS    0F                                                            00238001
0005D0                               1732=SPTAB    DS    CL255              SCOPE TABLE                   11-30        00239001
0006D0                               1733=         DS    0F                                                            00240001
                      006CD          1734=GPTAB    EQU   *-3                GROUP TABLE                   11-30        00241001
0006D0                               1735=         DS    CL1510                                                        00242001
                                     1736=*                                                                            00243001
                                     1737=*        END OF SYMLIB PART OF COMMON WORK AREA                              00244001
                                     1738=*                                                                            00245001
                                     1739 *                                                                            00744001
                                     1740 *        CWA SYMBOL DEFINITIONS FOR IEX11 CAN BE INSERTED HERE               00745001
                                     1741 *                                                                            00746001
                                     1742 *        REGISTER EQUATES                                                    00747001
                                     1743 *                                                                            00748001
                                     1744          IEZREGS                                                             00749001
                      00000          1745+R0       EQU   0                                                           01-IEZRE
                      00001          1746+R1       EQU   1                                                           01-IEZRE
                      00002          1747+R2       EQU   2                                                           01-IEZRE
                      00003          1748+R3       EQU   3                                                           01-IEZRE
                      00004          1749+R4       EQU   4                                                           01-IEZRE
                      00005          1750+R5       EQU   5                                                           01-IEZRE
                      00006          1751+R6       EQU   6                                                           01-IEZRE
                      00007          1752+R7       EQU   7                                                           01-IEZRE
                      00008          1753+R8       EQU   8                                                           01-IEZRE
                      00009          1754+R9       EQU   9                                                           01-IEZRE
                      0000A          1755+R10      EQU   10                                                          01-IEZRE
                      0000B          1756+R11      EQU   11                                                          01-IEZRE
                      0000C          1757+R12      EQU   12                                                          01-IEZRE
                      0000D          1758+R13      EQU   13                                                          01-IEZRE
                      0000E          1759+R14      EQU   14                                                          01-IEZRE
                      0000F          1760+R15      EQU   15                                                          01-IEZRE
                                     1761 *                                                                            00750001
000000                               1762          END   IEX10000                                                      00751001
```

```
Symbol    Length    Value     Id    Type Asm  Program   Defn  References                  X390 3.1.04  2012/08/17 13.12

=A(GOTOEDIT)
                4 00000508 00000001  A A                592   403
=A(GOTOTERM)
                4 000004F8 00000001  A A                588   119   352
=A(IEX10001)
                4 0000050C 00000001  A A                593   456
=A(OPEXERR)
                4 00000504 00000001  A A                591   316
=AL3(INEX)
                3 00000520 00000001  R A                600   301
=AL3(LINEX)
                3 0000051D 00000001  R A                599   298
=AL3(PCHEX)
                3 00000526 00000001  R A                602   307
=AL3(PRINTEX)
                3 00000523 00000001  R A                601   304
=C'SIZE='
                5 00000518 00000001  C C                598   149
=F'45056'
                4 000004FC 00000001  F F                589   211
=F'80'          4 00000500 00000001  F F                590   238   240
=H'1'           2 00000510 00000001  H H                594   186
=H'24'          2 00000516 00000001  H H                597   290
=H'7'           2 00000512 00000001  H H                595   203
=H'8'           2 00000514 00000001  H H                596   256   381
=XL8'00'        8 000004F0 00000001  X X                587   249
ASYSDCB         4 00000058 FFFFFFFE  A A               1413   545
AUT1DCB         4 00000064 FFFFFFFE  A A               1416   551
BYPASSOP        4 0000020A 00000001  I                  263   128B  233B  237B
CLOSE           2 0000048A 00000001  I                  543   512B  528B
COMPFLGS        4 00000080 FFFFFFFE  X X               1462   142   144M  273M  360M  410   414M  419   423M  444M  454
                                                              503M  529M  682M  685M  688M  691M  694M  697M  700M  703M
                                                              706M  709M  712M  715M  718M  721M  724M  727M  730M  733M
                                                              736M  739M  742M  745M  748M  751M  754M  757M  760M  763M
COMPINST        6 00000094 00000001  I                  148   153X
COMPMODE        1 00000080           U                 1466   144
COMP1           2 0000007E 00000001  I                  140   164B  214B  223B
DCBBIT0         1 00000080           U                  857   943   951   963   986  1013  1015  1016  1018  1041  1044
                                                             1064  1068  1083  1120  1175  1206  1245  1249  1262  1362
                                                             1364  1374
DCBBIT1         1 00000040           U                  858   944   952   965   987   988   997  1013  1015  1017  1018
                                                             1046  1064  1066  1068  1086  1087  1088  1123  1124  1175
                                                             1208  1251  1253  1265  1309  1362  1366  1375
DCBBIT2         1 00000020           U                  859   945   953   966   967   968   987   988   992   998  1013
                                                             1014  1019  1048  1069  1070  1091  1092  1093  1127  1128
                                                             1176  1213  1254  1270  1312  1315  1362  1376
DCBBIT3         1 00000010           U                  860   946   966   968   969   987  1000  1020  1051  1069  1072
                                                             1095  1096  1097  1131  1132  1176  1215  1218  1220  1256
                                                             1271  1312  1316  1362
DCBBIT4         1 00000008           U                  861   954  1001  1021  1052  1074  1079  1080  1100  1101  1135
                                                             1136  1138  1139  1177  1223  1272  1312  1317
DCBBIT5         1 00000004           U                  862   955  1002  1024  1025  1054  1074  1076  1077  1080  1104
                                                             1106  1107  1108  1142  1143  1144  1145  1177  1225  1228
                                                             1258  1274  1307
DCBBIT6         1 00000002           U                  863   947  1003  1004  1007  1024  1026  1055  1111  1112  1113
                                                             1114  1148  1149  1150  1151  1178  1231  1276  1318
DCBBIT7         1 00000001           U                  864   948  1003  1005  1007  1028  1059  1116  1117  1154  1155
                                                             1157  1158  1234  1260  1277  1320
DCBBLKSI        2 0000003E FFFFFFFF  H H               1279   311M  314M  465   468M  473   477M  482   485M  490   493M
DCBDDNAM        8 00000028 FFFFFFFF  C C               1038   252M  442
DCBEXLSA        3 00000025 FFFFFFFF  R A               1030   304M
DCBEXLST        4 00000024 FFFFFFFF  A A               1011   298M  301M  307M
DCBFDAD         8 00000005 FFFFFFFF  C C                884   887
DCBLRECL        2 00000052 FFFFFFFF  H H               1344   468   485   493
DCBOFLGS        1 00000030 FFFFFFFF  B B               1040   357   412   421   439   547
DCBOFOPN        1 00000010           U                 1051   357   412   421   439   547
DCBTABLE        4 00000048 FFFFFFFE  F F               1408   245   295   407
DDNAMES         4 000001A8 00000001  I                  232   133B  143B  145B  185B  228B
DECK            1 000000DF           U                 1489   706   751
EBCDIC          1 000000EF           U                 1492   712   733
EDITDATE        4 00000302 00000001  I                  370   359B
ENDPOOL         4 000000C4 FFFFFFFE  F F               1546   291M
ERET            4 00000090 FFFFFFFE  F F               1524   119M  316M  352M  403M
ERROR200        4 000000DA 00000001  I                  170   160B  193B  195B  204B
ERROR201        4 000003D2 00000001  I                  437   363B
ERROR208        4 00000178 00000001  I                  216   212B
ERRPOOL         4 000000BC FFFFFFFE  A A               1544   283M
FIELD1          8 00000790 00000001  P P                769   207M  209
FNDCOMMA        4 00000072 00000001  I                  137   141B
FNDDCB          4 000001E0 00000001  I                  246   239B  257B
FNDPAR          6 0000009A 00000001  I                  149   138B
FNDSIZE         4 00000120 00000001  I                  190   150B
FULLPOOL        6 00000196 00000001  I                  225   173B  221B
GOTOEDIT        2 0000046A 00000001  I                  526   455B  592
GOTOTERM        2 0000044C 00000001  I                  510   588
HEADDAY         2 000005E3 00000001  C C                668   396M
HEADING       121 0000058C 00000001  C C                662   401   663   667
HEADMON         3 000005E6 00000001  C C                670   397M
HEADTIME        9 000005EE 00000001  X X                673   375M
HEADYEAR        4 000005EA 00000001  C C                672   377M
H60             2 00000810 00000001  H H                815   386
IEX10000        1 00000000 00000001  J                   82   103U 1762
IEX10001        1 00000818 00000002  J                  817   593   819U
IHADCB          1 00000000 FFFFFFFF  J                  840   251U  297U  300U  303U  306U  309U  313U  356U  409U  418U
                                                              438U  461U  546U  925   972  1037  1166  1181  1188  1201
                                                             1297  1303  1330  1353
INEX            1 0000052C 00000001  X X                607   600
```

```
Symbol    Length    Value     Id      Type Asm  Program    Defn  References                         X390 3.1.04  2012/08/17 13.12

INEXRT         4 00000404 00000001  I                      465   607
INSTR          4 0000061E 00000001  I                      685   162X
ISO            1 00000010           U                     1493   721   754
JUMPEXEA       4 00000238 00000001  I                      283   279B
LATBEG         1 0000006C           U                     1533  1534
LATNR          1 0000001C           U                     1532  1533
LENGTH         1 00000614 00000001  R A                    683   147U  152   167
LINEX          1 00000530 00000001  X X                    608   599
LINEXRT        4 00000414 00000001  I                      473   608
LNG            1 00000002           U                     1472   691   748
LOAD           1 000000BF           U                     1486   700   757
LSTENTRY       1 00000780 00000001  R A                    761   135
MNTHTBL        2 000007B0 00000001  H H                    778   380
MOVE           6 000000F8 00000001  I                      179   187B
MOVENOT        4 00000102 00000001  I                      181   188B
MVCPOOL        6 00000232 00000001  I                      281   278X
NDECK          1 00000020           U                     1490   142   419   423   709   727
NEXTERR        4 000000C0 FFFFFFFE  A A                   1545   170   175M  216   222M  227M  241   244M  274   285M  362
                                                                 408   448M
NEXTMNTH       4 0000034C 00000001  I                      389   385B  387B  391B
NLOAD          1 00000040           U                     1487   142   410   414   703   730
NOBUF          1 00000002           U                     1500   273
NOGO           1 00000001           U                     1502   444   454   503
NOTEST         1 00000004           U                     1514   715   742
NOTFOUND       2 000000D0 00000001  I                      166   154B
NOTLEAP        4 00000340 00000001  I                      386   383B
NSRCE          1 00000080           U                     1484   697   724
NXTDDNAM       4 000001FA 00000001  I                      254   248B  250B
NXTPAR         4 000000A8 00000001  I                      152   168B
OPEXERR        4 00000446 00000001  I                      503   591
PAGEHD1      121 0000010C FFFFFFFE  C C                   1576   401M 1577  1581
PAGEHD2      121 00000185 FFFFFFFE  C C                   1586  1587
PAGEHD3      121 000001FE FFFFFFFE  C C                   1593  1594
PARAM          9 00000615 00000001  C C                    684   148
PARMLIST       1 00000605 00000001  R A                    680   151   167
PBTAB1       255 00000478 FFFFFFFE  C C                   1673  1674
PCHEX          1 00000534 00000001  X X                    609   602
PCHEXRT        4 00000426 00000001  I                      482   609
PCKINSTR       6 00000158 00000001  I                      207   208X
PCKSIZE        4 0000015E 00000001  I                      208   198B  201B
PGR            1 000000FB           U                     1468   682   736
PICAADD        4 00000088 FFFFFFFE  A A                   1522   112   118M
POOLS          4 000000DC FFFFFFFE  F F                   1558   263
PRELPOOL       1 00000278 FFFFFFFE  C C                   1611   276   281  1544  1545  1612  1670
PRINTEX        1 00000538 00000001  X X                    610   601
PROC           1 00000004           U                     1469   685   739
PRTEXRT        4 00000436 00000001  I                      490   610
PRTNO          1 00000010           U                     1511   360
PTRN200        1 0000053C 00000001  R A                    619   176
PTRN201        1 0000054C 00000001  R A                    623   441
PTRN202        1 00000550 00000001  R A                    628   415
PTRN203        1 00000554 00000001  R A                    633   424
PTRN206        1 00000580 00000001  R A                    649   225
PTRN207        1 00000584 00000001  R A                    653   242
PTRN208        1 00000588 00000001  R A                    658   217
R0             1 00000000           U                     1745   104   106   263M  264   265M  266   373
R1             1 00000001           U                     1746   118   281   283   284   286   288   373   461U  496D
R10            1 0000000A           U                     1755   155M  157   159   161   174M  175   190M  192   194   196M
                                                                 197   199   210   309U  312D  429
R11            1 0000000B           U                     1756   178M  186M  191M  202M  203   208   313U  315D  431
R12            1 0000000C           U                     1757   105M  107   295M  407M  433
R13            1 0000000D           U                     1758   104   105   106M  107   108U  125
R14            1 0000000E           U                     1759   125M  126M  127M  379M  386   388M  390M  393M  394   428M
                                                                 430M  432M  437M  440B  445B  467B  469B  475B  478B  484B
                                                                 486B  492B  494B  504B
R15            1 0000000F           U                     1760   102   380M  381M  389M  390   393   397
R2             1 00000002           U                     1747   102M  103U  456M  457B  506D  510M  511U  522D  526M  527U
                                                                 539D  819U
R3             1 00000003           U                     1748   112M  295M  297U  299D  407M  409U  417D  543M  544U  584D
R4             1 00000004           U                     1749   129M  130M  131   134   137   139M  140   148   149   155
                                                                 161M  179   181M  182   184   190   207   210M  234M  235
                                                                 249   252   254M  264M  286M  287   290M  291   310M  311
                                                                 314   362M  408M  415   416M  424   425M  441   442   443M
                                                                 448   512M  528M  563B  582B
R5             1 00000005           U                     1750   131M  132M  134M  140   159   184   197   235M  236M  238
                                                                 240M  256M  274M  277M  278   284M  285
R6             1 00000006           U                     1751   147U  151M  163D  166   167M  209M  211   213   245M  246
                                                                 255M  266M  288M  289   465M  466M  473M  474M  476M  477
                                                                 482M  483M  490M  491M  545M  546U  548D  566
R7             1 00000007           U                     1752   135M  166   246M  247M  251U  253D  276M  277   300U  302D
                                                                 348   361M  429M  431M  433M  438U  447D  551M
R8             1 00000008           U                     1753   136M  152M  153   155   303U  305D  356U  358D  361
R9             1 00000009           U                     1754   170M  172   174   176   179   180M  216M  217   219M  220
                                                                 222   225   226M  227   241M  242   243M  244   306U  308D
                                                                 418U  426D
SETBIT         2 000000C6 00000001  I                      161   158B
SHRT           1 000000FD           U                     1471   688   745
SIZE           4 00000084 FFFFFFFE  F F                   1521   213M
SRCE           1 0000007F           U                     1483   694   760
SRCE1ADD       4 000000C8 FFFFFFFE  F F                   1547   287M
SRCE1END       4 000000CC FFFFFFFE  F F                   1548   289M
SRCE1S         4 000000E0 FFFFFFFE  F F                   1559   265   310  1560
STEP1          4 0000007A 00000001  I                      139   183B
STPOINTR       4 000003F2 00000001  I                      448   437
SWITCH         2 000004BA 00000001  I                      563   550M
TEMP           4 00000798 00000001  F F                    771   376M  377
TEMP1          8 000007A0 00000001  D D                    772   378M  379   394M  395M  396
```

```
Symbol     Length    Value     Id    Type Asm  Program    Defn  References                                X390 3.1.04  2012/08/17 13.12

TEMP2           4 000007A8 00000001  F F                   773   373M  375
TEMP3           4 000007AC 00000001  F F                   774   376   378   382   384
TERR            1 00000008           U                    1479   529
TEST            1 000000FB           U                    1515   718   763
TSTDCBRT        4 000003D6 00000001  I                     439   428B  430B  432B
TSTDIGIT        4 00000126 00000001  I                     192   205B
TSTIN           4 000003C0 00000001  I                     428   420B  422B
TSTPUNCH        4 000003A2 00000001  I                     419   411B  413B
WORKAREA        1 00000000 FFFFFFFE  J                    1396   108U
```

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)          X390 3.1.04  2012/08/17 13.12

    0(0)   100   104   106   263M  264   265M  266   373   573M  578M
    1(1)   100   115M  118   270M  281   283   284   286   288   323M  329N  330   331N  332   333N  334   335N  336
           337N  338   343M  346N  347   348N  349   370M  373   461U  496D  555M  558N  559N  560   566M  567   568
           570M  571M  573M  574M  577M  578   579M
    2(2)   100   102M  103U  456M  457B  506D  510M  511U  522D  526M  527U  539D  819U
    3(3)   100   112M  115   295M  297U  299D  329   407M  409U  417D  543M  544U  584D
    4(4)   100   129M  130M  131   134   137   139M  140   148   149   155N  161M  179   181M  181N  182   184   190N
           207   210M  234M  235N  249   252   254M  254N  264M  286M  287   290M  291   295M  310M  311   314   362M
           407M  408M  415   416M  416N  424   425M  425N  441   442   443M  443N  448   512M  528M  563B  582B
    5(5)   100   131M  132M  134M  140   159   184   197   235M  236M  238   240M  256M  274M  277M  278   284M  285
           295M  407M
    6(6)   100   147U  151M  163D  166   167M  167N  209M  211   213   245M  246N  255M  255N  266M  288M  289   295M
           407M  465M  466M  473M  474M  476M  477   482M  483M  490M  491M  545M  546U  548D  558   566
    7(7)   100   135M  166   246M  247M  251U  253D  276M  277   295M  300U  302D  348   361M  407M  429M  431M  433M
           438U  447D  551M  559
    8(8)   100   136M  152M  153   155   295M  303U  305D  331   356U  358D  361   407M
    9(9)   100   170M  172   174N  176   179   180M  180N  216M  217   219M  219N  220   222   225   226M  226N  227
           241M  242   243M  243N  244   295M  306U  308D  333   407M  418U  426D
   10(A)   100   155M  157   159   161   174M  175   190M  192   194   196M  196N  197   199   210   295M  309U  312D
           346   407M  429
   11(B)   100   178M  186M  191M  202M  202N  203   208   295M  313U  315D  335   407M  431
   12(C)   100   105M  107   295M  337   407M  433
   13(D)   100   104N  105   106M  107N  108U  125
   14(E)   100   125M  126M  127M  129   232   234N  379M  386   388M  390M  393M  394   428M  430M  432M  437M  440B
           445B  467B  469B  475B  478B  484B  486B  492B  494B  504B  569M  572M  573
   15(F)    96B  100   102   380M  381M  389M  390   393   397   516M  533M  567M  571   572   575   579   825M
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| IHADCB | 00000060 | FFFFFFFF | 840 | 1 | DCBD |
| WORKAREA | 00000CB6 | FFFFFFFE | 1396 | | PRIMARY INPUT |

X390 3.1.04 2012/08/17 13.12

```
Con Source       Members                                                                X390 3.1.04  2012/08/17 13.12

  1 SYS1.MACLIB
                 CLOSE    DCB      DCBD     FREEPOOL GETMAIN  IEZREGS  IHBINNRA IHBINNRB IHB01    OPEN     SAVE
                 SPIE     TIME     XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
  4 SYSD.ALGOLF.MACLIB
                 WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text | X390 3.1.04 2012/08/17 13.12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 103 | | USING | Ordinary | 00000001 | 00000000 | 00001000 | 2 | 00810 | 456 | IEX10000,R2 | |
| 108 | | USING | Ordinary | FFFFFFFE | 00000000 | 00001000 | 13 | 00278 | 763 | WORKAREA,R13 | |
| 147 | | USING | Ordinary | 00000001 | 00000614 | 00001000 | 6 | 0000A | 162 | LENGTH,R6 | |
| 163 | | DROP | | | | | 6 | | | R6 | |
| 251 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 7 | 00028 | 252 | IHADCB,R7 | |
| 253 | | DROP | | | | | 7 | | | R7 | |
| 297 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 3 | 00025 | 298 | IHADCB,R3 | |
| 299 | | DROP | | | | | 3 | | | R3 | |
| 300 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 7 | 00025 | 301 | IHADCB,R7 | |
| 302 | | DROP | | | | | 7 | | | R7 | |
| 303 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 8 | 00025 | 304 | IHADCB,R8 | |
| 305 | | DROP | | | | | 8 | | | R8 | |
| 306 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 9 | 00025 | 307 | IHADCB,R9 | |
| 308 | | DROP | | | | | 9 | | | R9 | |
| 309 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 10 | 0003E | 311 | IHADCB,R10 | |
| 312 | | DROP | | | | | 10 | | | R10 | |
| 313 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 11 | 0003E | 314 | IHADCB,R11 | |
| 315 | | DROP | | | | | 11 | | | R11 | |
| 356 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 8 | 00030 | 357 | IHADCB,R8 | |
| 358 | | DROP | | | | | 8 | | | R8 | |
| 409 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 3 | 00030 | 412 | IHADCB,R3 | |
| 417 | | DROP | | | | | 3 | | | R3 | |
| 418 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 9 | 00030 | 421 | IHADCB,R9 | |
| 426 | | DROP | | | | | 9 | | | R9 | |
| 438 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 7 | 00030 | 442 | IHADCB,R7 | |
| 447 | | DROP | | | | | 7 | | | R7 | |
| 461 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 1 | 00052 | 493 | IHADCB,R1 | |
| 496 | | DROP | | | | | 1 | | | R1 | |
| 506 | | DROP | | | | | 2 | | | R2 | |
| 511 | | USING | Ordinary | 00000001 | 0000044E | 00001000 | 2 | 0003C | 516 | *,R2 | |
| 522 | | DROP | | | | | 2 | | | R2 | |
| 527 | | USING | Ordinary | 00000001 | 0000046C | 00001000 | 2 | 0001E | 533 | *,R2 | |
| 539 | | DROP | | | | | 2 | | | R2 | |
| 544 | | USING | Ordinary | 00000001 | 0000048C | 00001000 | 3 | 00058 | 576 | *,R3 | |
| 546 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 6 | 00030 | 547 | IHADCB,R6 | |
| 548 | | DROP | | | | | 6 | | | R6 | |
| 584 | | DROP | | | | | 3 | | | R3 | |
| 819 | | USING | Ordinary | 00000002 | 00000818 | 00001000 | 2 | 00014 | 825 | IEX10001,R2 | |

```
The following statements were flagged -

  SYSD.ALGOLF.ASM(IEX10)
    147(140)

1 statement flagged in this assembly,  4 was the highest severity code.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X10    STEPNAME: IEX10    PROCSTEP: X390

Primary input:  lines      1 to     751 of SYSD.ALGOLF.ASM(IEX10)

SYSLIB library records read: 5600

SYSUT1 work file size: 132369 bytes

SYSUT2 work file size: 501840 bytes

SYSUT3 work file size: 60080 bytes

SYSLIN file records written: 44

TXA000I Return code 4, elapsed time 1.84 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX10000 | 000812 | 6 |
| IEX10001 | 00082E | 2 |

# IEX11

LEVEL

V2.M01

 X390 3.1.04 2012/08/17 13.12

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX11)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131252.RA000.T1X11.OBJECT
SYSPRINT    JES2.JOB09270.SO0102
SYSUT1      SYS12230.T131252.RA000.T1X11.SYSUT1
SYSUT2      SYS12230.T131252.RA000.T1X11.SYSUT2
SYSUT3      SYS12230.T131252.RA000.T1X11.SYSUT3
```

```
 Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.12

                                     2 *                                                                      00002001
                                     3 *        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                   00003001
                                     4 *                                                                      00004001
                                     5 *        FUNCTION/OPERATION -                                          00005001
                                     6 *        TO TRANSFORM THE SOURCE PROGRAM TO MODIFICATION LEVEL 1,      00006001
                                     7 *        WHICH INCLUDES A ONE FOR ONE TRANSLATION OF ALL               00007001
                                     8 *        CHARACTERS, THE REPLACEMENT OF ALL ALGOL DELIMITERS BY        00008001
                                     9 *        ONE BYTE OPERATORS AND THE REMOVAL OR MODIFICATION OF         00009001
                                    10 *        ALL DECLARATIONS                                              00010001
                                    11 *        1. TABULATE AND CLASSIFY ALL VALID IDENTIFIERS                00011001
                                    12 *        2. ASSIGN A SERIAL PROGRAM BLOCK NUMBER TO ALL BLOCKS         00012001
                                    13 *           AND PROCEDURES AND A SERIAL GROUP NUMBER TO ALL BLOCKS,    00013001
                                    14 *           PROCEDURES AND FOR STATEMENTS                              00014001
                                    15 *        3. RECOGNIZE SYNTACTICAL ERRORS IN THE SOURCE PROGRAM         00015001
                                    16 *           AND TO GENERATE APPROPRIATE ERROR PATTERNS                 00016001
                                    17 *        4. PRINT A LISTING ON SYSPRINT OF THE SOURCE PROGRAM IF       00017001
                                    18 *           OPTION SOURCE IS SPECIFIED                                 00018001
                                    19 *        5. PREPARE TABLES TO BE USED BY THE SUCCEEDING PHASES.        00019001
                                    20 *           THE TABLES ARE PBTAB1, GROUPTABLE, AND SCOPETABLE          00020001
                                    21 *                                                                      00021001
                                    22 *        ENTRY POINTS -                                                00022001
                                    23 *        IEX11000 SCAN I/II XCTL EP=IEX11000                           00023001
                                    24 *                                                                      00024001
                                    25 *        INPUT - THE SOURCE PROGRAM IS READ IN FROM SYSIN              00025001
                                    26 *                                                                      00026001
                                    27 *        OUTPUT -                                                      00027001
                                    28 *        1. THE SOURCE PROGRAM, MODIFICATION LEVEL 1, IS WRITTEN       00028001
                                    29 *           ON SYSUT1                                                  00029001
                                    30 *        2. AN ITAB RECORD IS WRITTEN FOR EACH BLOCK ON SYSUT3         00030001
                                    31 *        3. ESD CARD FOR THE OBJECT MODULE AND TXT CARDS FOR THE       00031001
                                    32 *           CONSTANTS 0 THROUGH 15 AND THE STRINGS IN THE CONSTANT     00032001
                                    33 *           POOL ARE WRITTEN ON SYSLIN AND OR SYSPUNCH IF THE          00033001
                                    34 *           OPTIONS LOAD AND OR DECK IS SPECIFIED                      00034001
                                    35 *        4. THE SOURCE PROGRAM IS LISTED ON SYSPRINT IF THE            00035001
                                    36 *           SOURCE OPTION IS SPECIFIED                                 00036001
                                    37 *                                                                      00037001
                                    38 *        EXITS - NORMAL -                                              00038001
                                    39 *        CONTROL IS GIVEN TO ITAB MANIPULATION, XCTL EP=IEX20000       00039001
                                    40 *        IF NO TERMINATING ERROR HAS BEEN DETECTED                     00040001
                                    41 *                                                                      00041001
                                    42 *        EXITS - ERROR -                                               00042001
                                    43 *        IF A TERMINATING ERROR HAS BEEN DETECTED CONTROL IS           00043001
                                    44 *        GIVEN TO THE ERROR MESSAGE HANDLING PHASE XCTL                00044001
                                    45 *        EP=IEX21000                                                   00045001
                                    46 *                                                                      00046001
                                    47 *        EXTERNAL ROUTINES - THE PRINT ROUTINE IN IEX00 IS USED        00047001
                                    48 *                                                                      00048001
                                    49 *        TABLES/WORKAREAS -                                            00049001
                                    50 *        BPRTAB    - BRANCH ADDR TABLE                                 00050001
                                    51 *        TESTTABL  - FOR MAINLOOP SCANNING                             00051001
                                    52 *        TRINTEXT  - FOR TRANSLATION FROM INTERNAL TO EBCDIC           00052001
                                    53 *                    CHARACTER SET                                     00053001
                                    54 *        COMTABLE  - USED BY COMMENT PROGRAM                           00054001
                                    55 *        STRTABLE  - USED BY STRING PROGRAM                            00055001
                                    56 *        BTABLE    - USED BY BLANK PROGRAM                             00056001
                                    57 *        KEYTAB    - USED BY TRANSOP                                   00057001
                                    58 *        PTTABLE   - USED BY POINT AND POINT IN LIST PROGRAMS          00058001
                                    59 *        TREXTINT  - FOR TRANSLATION FROM EBCDIC TO INTERNAL           00059001
                                    60 *                    CHARACTER SET                                     00060001
                                    61 *        KFCONST   - CONTAIN THE FULL WORD CONSTANTS 0 THROUGH 15      00061001
                                    62 *        ATABLE    - USED BY APOSTROF                                  00062001
                                    63 *        SCTAB     - USED TO SAVE THE STARTING SEMICOLON COUNTER       00063001
                                    64 *                    FOR THE BLOCKS                                    00064001
                                    65 *        KEYWTAB   - TABLE OF ALGOL KEYWORDS                           00065001
                                    66 *        KWLUTAB   - DISPLACEMENTS INTO KEYWTAB                        00066001
                                    67 *        DELPRGTB  - BRANCH ADDR TABLE AFTER A DELIMITER HAS           00067001
                                    68 *                    BEEN FOUND                                        00068001
                                    69 *        ARTABLE   - USED BY LIST PROGRAM                              00069001
                                    70 *        WA        - 80 BYTE WORKAREA WITH 17 PRECEEDING CHARACTERS,   00070001
                                    71 *                    USED FOR INPUT RECORDS. THE 17 EXTRA BYTES USED   00071001
                                    72 *                    TO OVERLAP BETWEEN ONE RECORD AND THE NEXT ONE    00072001
                                    73 *        STACK     - USED FOR THE SCOPE STRUCTURE HANDLING             00073001
                                    74 *        ITAB      - USED TO TABULATE ALL VALID IDENTIFIERS            00074001
                                    75 *        SAVEPRT   - DUMMY PRINTAREA. USED TO PICK UP STRINGS FROM     00075001
                                    76 *                    IN EBCDIC FORM IF THE OPTION 'NOSOURCE'           00076001
                                    77 *                    IS SPECIFIED                                      00077001
                                    78 *                                                                      00078001
                                    79 *        NOTES -                                                       00079001
                                    80 *        CHARACTER CODE DEPENDENCE IF THE SOURCE PROGRAM IS IN         00080001
                                    81 *        ISO CODE A SCAN IS MADE IN THE PROGRAM CIB TO EXCHANGE        00081001
                                    82 *        THE CHARACTERS -                                              00082001
                                    83 *        4C, 7B, 7C, 6C, 50,                                           00083001
                                    84 *        WITH THE EBCDIC CHARACTERS -                                  00084001
                                    85 *        5D, 7E, 7D, 4D, 4E                                            00085001
                                    86 *        THEN WHEN THE SOURCE PROGRAM IN WA IS IN EBCDIC FORM IT       00086001
                                    87 *        IS TRANSFERRED TO THE PRINTBUFFER, POSSIBLY THE DUMMY         00087001
                                    88 *        PRINTAREA. THE SOURCE PROGRAM IN WA IS THEN TRANSLATED        00088001
                                    89 *        TO INTERNAL CODE BY MEANS OF THE HEXADECIMAL TABLE            00089001
                                    90 *        TREXTINT. THE INVERSE TABLE, TRANSLATING FROM INTERNAL TO     00090001
                                    91 *        EBCDIC CODE, IS CALLED TRINTEXT AND IS IN CHARACTER FORM.     00091001
                                    92 *        THE TRANSFER OF PRECOMPILED AND CODE PROCEDURE NAMES,         00092001
                                    93 *        THE TRANSFER OF STRINGS AND CONSTANTS TO THE CONSTANT         00093001
                                    94 *        POOL AND THE OPERATION OF THE ROUTINE GENERATE DEPENDS        00094001
                                    95 *        ON AN INTERNAL REPRESENTATION OF THE EXTERNAL CHARACTER       00095001
                                    96 *        SET WHICH IS EQUIVALENT TO THE ONE USED AT ASSEMBLY           00096001
                                    97 *        TIME. THE OPERATION OF THE OTHER PARTS DOES NOT DEPEND        00097001
```

```
  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                             X390 3.1.04  2012/08/17 13.12

                                     98 *        UPON A PARTICULAR INTERNAL REPRESENTATION OF THE             00098001
                                     99 *        EXTERNAL CHARACTER SET                                       00099001
                                    100 *                                                                     00100001
                                    101 *        THIS MODULE IS ONLY INTENDED TO BE EXECUTED IN               00101001
                                    102 *        CONNECTION WITH THE OTHER MODULES OF THE ALGOL COMPILER.     00102001
                                    103 *        IN PARTICULAR IT REQUIRES THE COMMON WORKAREA                00103001
                                    104 *                                                                     00104001
                                    105 *        INITIALIZATION                                               00105001
                                    106 *        MAINLOOP AND ITS SUBPROGRAMS                                 00106001
                                    107 *        BLANK                                                        00107001
                                    108 *        TRANSOP (*,/,(,>,<,NOT,)                                     00108001
                                    109 *        RIGHTPAR                                                     00109001
                                    110 *        POINT                                                        00110001
                                    111 *        COLON                                                        00111001
                                    112 *        LABEL                                                        00112001
                                    113 *        LETDEL                                                       00113001
                                    114 *        ASSIGN                                                       00114001
                                    115 *        APOSTROPHE                                                   00115001
                                    116 *        SCALE                                                        00116001
                                    117 *        BLKAPOS                                                      00117001
                                    118 *        ZETAAPOS                                                     00118001
                                    119 *        NPAFAPO (NOT PERMITTED)                                      00119001
                                    120 *        SOME GENERAL ROUTINES                                        00120001
                                    121 *        STATE (STATEMENT PROGRAM)                                    00121001
                                    122 *        ERROR ROUTINES                                               00122001
                                    123 *        ITABCLEA                                                     00123001
                                    124 *        IDCHCK1                                                      00124001
                                    125 *        FINDSEMCO                                                    00125001
                                    126 *        AND TABLES AND CONSTANTS OUTSIDE CWA                         00126001
                                    127 *                                                                     00127001
                                    128 *        COB (CHANGE OUTPUT BUFFER)                                   00128001
                                    129 *        CIB (CHANGE INPUT BUFFER)                                    00129001
                                    130 *        DELIMITER EROUT (DELIMITER ERROR ROUTINE)                    00130001
                                    131 *        NORMAL (/ OR AND NOT STEP LESS IMPL UNTIL WHILE POWER        00131001
                                    132 *        EQUIU                                                        00132001
                                    133 *        NOTLESS GREATER NOTEQUAL NOT GREATER)                        00133001
                                    134 *        BOLCON ('TRUE', 'FALSE')                                     00134001
                                    135 *        GIF (GOTO, IF)                                               00135001
                                    136 *        TED (THEN, ELSE, DO)                                         00136001
                                    137 *        BEGIN                                                        00137001
                                    138 *        BEGI (BLOCKHEAD)                                             00138001
                                    139 *        END                                                          00139001
                                    140 *        FOREND                                                       00140001
                                    141 *        PBLCKEND                                                     00141001
                                    142 *        COM (COMMENT)                                                00142001
                                    143 *        FOR                                                          00143001
                                    144 *        TYPE (REAL, INTEGER, BOOLEAN)                                00144001
                                    145 *        IER (IDENT ERROR ROUTINE)                                    00145001
                                    146 *        CODE                                                         00146001
                                    147 *                                                                     00147001
                                    148 *        IDCHECK (SPECIFIED IDENTIFIERS)                              00148001
                                    149 *        VALUE                                                        00149001
                                    150 *        TYPEARRAY                                                    00150001
                                    151 *        ARRAY                                                        00151001
                                    152 *        TRATE (ARRAY AND SWITCH LIST)                                00152001
                                    153 *        PONTLST                                                      00153001
                                    154 *        SEMCLST                                                      00154001
                                    155 *        LEFTPARL                                                     00155001
                                    156 *        RIGHTPARL                                                    00156001
                                    157 *        SLASHLST                                                     00157001
                                    158 *        COMMALST                                                     00158001
                                    159 *        COLONLST                                                     00159001
                                    160 *        SWITCH                                                       00160001
                                    161 *        STRING                                                       00161001
                                    162 *        TYPPROC                                                      00162001
                                    163 *        PROCEDURE                                                    00163001
                                    164 *        PROCEDEL (PROC LETTERSTRING)                                 00164001
                                    165 *        ENDMISSIN (UNBALANCED BEGIN END COUNT)                       00165001
                                    166 *                                                                     00166001
                                    167 *        TERMINATION                                                  00167001
                                    168 *                                                                     00168001
000000                00000 02E40   169 IEX11000 CSECT                                                        00169001
                                    170 *                                                                     00170001
                                    171 *        R3                        OUTPUT POINTER                     00171001
                                    172 *        R4                        POINTS TO FIRST APOSTROPHE         00172001
                                    173 *        R4                        TRANSOP REGISTER                   00173001
                                    174 *        R4                        LINK REGISTER FOR PRGBLOCKEND      00174001
                                    175 *        R4                        LINK REGISTER FOR FDREND           00175001
                                    176 *        R6                        RETURN REG FROM ERROR ROUTINES     00176001
                                    177 *        R7                        ITAB POINTER                       00177001
                                    178 *        R8                        BASE REGISTER                      00178001
                                    179 *        R9                        RETURN REGISTER FROM BEGI          00179001
                                    180 *        R10                       TESTLOOP AND LIST MAIN RETURN REG  00180001
                                    181 *        R11                       BASE REGISTER                      00181001
                                    182 *        R12                       SPECIFICATION HANDLING             00182001
                                    183 *        R12                       RETURN REG FROM COB                00183001
                                    184 *        R14                       LABEL POINTER                      00184001
                                    185 *                                                                     00185001
                                    186 *        INITIALIZATION                                               00186001
                                    187 *                                                                     00187001
                                    188 *        GETMAIN FOR -                                                00188001
                                    189 *        1. KOPOOL                                                    00189001
                                    190 *        2. STACK                                                     00190001
                                    191 *        3. ITABBUF                                                   00191001
                                    192 *        4. OUTPUTAREA2                                               00192001
                                    193 *        5. ITAB                                                      00193001
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                    194 *        ALPHA 00 IS PUT IN STACK AND SP (STACK POINTER) IS MADE        00194001
                                    195 *        TO POINT TO NEXT BYTE                                          00195001
                                    196 *        ADDR OF THE FIRST O/P AREA IS TAKEN FROM CWA AND PUT           00196001
                                    197 *        IN ADDARI. THE ADDR OF SECOND O/P AREA (FROM                   00197001
                                    198 *        GETMAIN) IS PUT IN ADDARI+4                                    00198001
                                    199 *        AITAB, LIGP, LPBP, AITAB AND ELI ARE INITILIZED IN             00199001
                                    200 *        ITAB. HEADLINE FOR PB0 IS CREATED.                             00200001
                                    201 *        AITAB, LPBP, LIGP WILL POINT TO PB0 HEAD                       00201001
                                    202 *        AITL TO NEXT FREE ENTRY                                        00202001
                                    203 *        ELI TO LAST POSITION+1 OF ITAB                                 00203001
                                    204 *        APE WILL POINT TO LAST POSITION IN FIRST OUTPUT BUFFER         00204001
                                    205 *        WADDARI (CURRENT OUTPUT BUFFER) WILL POINT TO FIRST            00205001
                                    206 *        OUTPUT BUFFER                                                  00206001
                                    207 *        R3 WILL POINT TO FIRST O/P BUFFER                              00207001
                                    208 *        PRINTING OF HEADLINES IS INITIALIZED IF SOURCE WAS             00208001
                                    209 *        SPECIFIED                                                      00209001
                                    210 *        SWITCHES ARE SET TO ZERO                                       00210001
                                    211 *        FIRST ENTRIES IN TABLES ARE SET TO ZERO                        00211001
                                    212 *                                                                       00212001
                                    213          IEXENTRY 'IEX11000 LEVEL 2.1 &SYSDATE &SYSTIME'                00213001
                                    214+*                                                                       01-IEXEN
000000 47F0 F026            00026   215+         B     38(,R15)              BRANCH AROUND ID                   01-IEXEN
000004 21                           216+         DC    AL1(33)               LENGTH OF IDENTIFIER               01-IEXEN
000005 C9C5E7F1F1F0F0F0             217+         DC    CL33'IEX11000 LEVEL 2.1 08/17/12 13.12'                 +01-IEXEN
                                       +                                           IDENTIFIER                   01-IEXEN
                                    218 *                                                                       00214001
               R:58B  00000         219          USING IEX11000,R5,R8,R11                                       00215001
000026 185F                         220          LR    R5,R15                                                   00216001
000028 4180 5800            00800   221          LA    R8,2048(,R5)                                             00217001
00002C 4180 8800            00800   222          LA    R8,2048(,R8)                                             00218001
000030 41B0 8800            00800   223          LA    R11,2048(,R8)                                            00219001
000034 41B0 B800            00800   224          LA    R11,2048(,R11)                                           00220001
                                    225 *                                                                       00221001
                 R:D  00000         226          USING WORKAREA,R13                                             00222001
000038 41C0 B36E            0236E   227          LA    R12,SLUT2                                                00223001
00003C 50C0 D090            00090   228          ST    R12,ERET              INTERUPT BEFORE GETMAIN            00224001
000040 4810 BD58            02D58   229          LH    R1,KH4096             KOPOOL                             00225001
000044 4110 13E8            003E8   230          LA    R1,1000(,R1)          STACK                              00226001
000048 5A10 D0E0            000E0   231          A     R1,SRCE1S             O/P BUFFER 1                       00227001
00004C 5A10 D0E4            000E4   232          A     R1,ITAB10S            ITAB                               00228001
000050 4110 17D0            007D0   233          LA    R1,2000(,R1)          ITAB BUF                           00229001
000054 5010 DCBC            00CBC   234          ST    R1,POOLLEN            STORE TOTAL LENGTH                 00230001
000058 1801                         235          LR    R0,R1                                                    00231001
                                    236 *                                                                       00232001
                                    237          GETMAIN R,LV=(0)            GET AREAS NEEDED                   00233001
                                    238+*        OS/VS2 RELEASE 4 VERSION -- 10/21/75                           01-GETMA
00005A 4510 505E            0005E   239+         BAL   1,*+4                           INDICATE GETMAIN         01-GETMA
00005E 0A0A                         240+         SVC   10                              ISSUE GETMAIN SVC        01-GETMA
                                    241 *                                                                       00234001
000060 5010 DCC0            00CC0   242          ST    R1,POOLLOC            SAVE LOCATION                      00235001
000064 41C0 B2EE            022EE   243          LA    R12,ENDMISS           END OF DATA ADDR                   00236001
000068 50C0 D07C            0007C   244          ST    R12,EODIN                                                00237001
00006C 41C0 B3B2            023B2   245          LA    R12,EODADIN                                              00238001
000070 50C0 D090            00090   246          ST    R12,ERET              ADDR AFTER GETMAIN                 00239001
000074 5010 DD54            00D54   247          ST    R1,AKOPOOL            ADDR OF KOPOOL                     00240001
000078 4110 1FFF            00FFF   248          LA    R1,4095(,R1)                                             00241001
00007C D203 1001 BD0C 00001 02D0C   249          MVC   1(4,R1),KF0           INITIALIZE STACK                   00242001
000082 4110 1002            00002   250          LA    R1,2(,R1)                                                00243001
000086 5010 DCD8            00CD8   251          ST    R1,SP                 ADDR OF SECOND BYTE IN STACK       00244001
00008A 4110 13E7            003E7   252          LA    R1,999(,R1)                                              00245001
00008E 5010 DCC4            00CC4   253          ST    R1,AITABBUF           INITIALIZE ITAB BUFFER             00246001
000092 4110 17D0            007D0   254          LA    R1,2000(,R1)                                             00247001
000096 5010 DCD0            00CD0   255          ST    R1,ADDARI+4                     OUTPUTAREA 2             00248001
00009A 5A10 D0E0            000E0   256          A     R1,SRCE1S                                                00249001
00009E 5010 DD64            00D64   257          ST    R1,AITAB                        ITAB                     00250001
0000A2 5010 DD6C            00D6C   258          ST    R1,LIGP               SURROUNDING GROUP ADDR             00251001
0000A6 5010 DD70            00D70   259          ST    R1,LPBP                         BLOCK ADDR               00252001
0000AA 9200 1000      00000         260          MVI   0(R1),0               CLEAR FIRST TWO ITAB ENTRIES       00253001
0000AE D214 1001 1000 00001 00000   261          MVC   1(21,R1),0(R1)                                           00254001
0000B4 92FF 1003      00003         262          MVI   3(R1),X'FF'           CONSTRUCT CONTINUATION             00255001
0000B8 922B 1005      00005         263          MVI   5(R1),XFBLANK         LINE FOR PB0                       00256001
0000BC 41C0 100B            0000B   264          LA    R12,11(,R1)                                              00257001
0000C0 50C0 DD68            00D68   265          ST    R12,AITL              ADDR OF FIRST FREE ENTRY           00258001
0000C4 5A10 D0E4            000E4   266          A     R1,ITAB10S                                               00259001
0000C8 5010 DCC8            00CC8   267          ST    R1,ELI                END OF ITAB                        00260001
0000CC 5830 D0C8            000C8   268          L     R3,SRCE1ADD           ADDR OF FIRST OUTPUT BUFFER        00261001
0000D0 5A30 D0E0            000E0   269          A     R3,SRCE1S                                                00262001
0000D4 0630                         270          BCTR  R3,0                                                     00263001
0000D6 5030 DCDC            00CDC   271          ST    R3,APE                END OF FIRST O/P BUFFER            00264001
0000DA 5830 D0C8            000C8   272          L     R3,SRCE1ADD           OUTPUT AREAS CONSTANTS             00265001
0000DE D203 DCCC D0C8 00CCC 000C8   273          MVC   ADDARI(4),SRCE1ADD                                       00266001
0000E4 D203 DD74 DCCC 00D74 00CCC   274          MVC   WADDARI(4),ADDARI     CURRENT O/P AREA ADDR              00267001
0000EA 41C0 BDE4            02DE4   275          LA    R12,SAVEPRNT          APRNTAR INITIALIZED WITH           00268001
0000EE 50C0 DD44            00D44   276          ST    R12,APRNTAR           DUMMY PRINT AREA ADDR              00269001
                                    277 *                                                                       00270001
                                    278 *        SETUP HEADING TEXT                                             00271001
                                    279 *                                                                       00272001
0000F2 D20D D135 BD8D 00135 02D8D   280          MVC   PAGEHD1D+30(L'HEAD1),HEAD1                               00273001
0000F8 D216 D194 BD9B 00194 02D9B   281          MVC   PAGEHD2D+4(L'HEAD2),HEAD2                                00274001
0000FE 92FF D099      00099         282          MVI   LINCNT+1,255          FORCE HEADINGS                     00275001
000102 4590 5A28            00A28   283          BAL   R9,CIB                GET FIRST RECORD AND ADDR          00276001
                                    284 *                                    OF FIRST PRINTAREA                 00277001
000106 1B22                         285          SR    R2,R2                 ZERO REG                           00278001
000108 4220 DD85            00D85   286          STC   R2,ONC                ZERO COUNTERS                      00279001
00010C 4220 DCD4            00CD4   287          STC   R2,DISP               ZERO SWITCHES                      00280001
000110 41C0 0040            00040   288          LA    R12,64                                                   00281001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                       X390 3.1.04  2012/08/17 13.12

000114 50C0 D0A4            000A4   289          ST    R12,PRPT                PROGRAM POINTER                   00282001
000118 4020 DD4C            00D4C   290          STH   R2,IGC                  ZERO ITAB GROUP COUNTER           00283001
00011C 5020 DD7C            00D7C   291          ST    R2,MGESITL                                                00284001
000120 4220 DD84            00D84   292          STC   R2,PBC                  ZERO PROGRAM BLOCK COUNTER (PBC)  00285001
000124 4220 DD85            00D85   293          STC   R2,ONC                  ZERO OUTPUT RECORD COUNTER (ONC)  00286001
000128 4220 DD8E            00D8E   294          STC   R2,BITS1                ZERO SWITCHBITS                   00287001
00012C 4220 DD8F            00D8F   295          STC   R2,BITS2                                                  00288001
000130 4220 DD90            00D90   296          STC   R2,BITS3                                                  00289001
000134 4020 D09C            0009C   297          STH   R2,SEMCNT               ZERO SEMICOLON COUNTER            00290001
000138 4220 DD82            00D82   298          STC   R2,FSN                  ZERO FSN                          00291001
00013C 4220 D478            00478   299          STC   R2,PBTAB1               ZERO PB0                          00292001
000140 5020 D6D0            006D0   300          ST    R2,GPTAB+3              ZERO GROUP AND SCOUP TABLE        00293001
000144 4220 D5D0            005D0   301          STC   R2,SPTAB                                                  00294001
000148 4220 3000            00000   302          STC   R2,0(,R3)               FIRST BYTE IN FIRST OUTPUTRECD    00295001
00014C 5030 DD88            00D88   303          ST    R3,OPIN                                                   00296001
000150 5030 DD58            00D58   304          ST    R3,LAPIN                SET LABEL POINTERS                00297001
000154 4220 DD8C            00D8C   305          STC   R2,OPIN+4                                                 00298001
000158 41C0 D6CD            006CD   306          LA    R12,GPTAB                                                 00299001
00015C 50C0 DD50            00D50   307          ST    R12,AGT                 ADDR TO GROUPTABLE                00300001
000160 58C0 DCC4            00CC4   308          L     R12,AITABBUF                                              00301001
000164 06C0                         309          BCTR  R12,0                                                     00302001
000166 50C0 DD48            00D48   310          ST    R12,ATOPSTAK            HIGHEST BYTE IN STACK TO USE      00303001
00016A 47F0 5174            00174   311          B     TESTLOOP                GOTO START PROCESSING             00304001
                                    312 *                                                                        00305001
00016E D200 3000 4000 00000 00000   313 EXMVC    MVC   0(1,R3),0(R4)                                             00306001
                                    314 *                                                                        00307001
                                    315 *        MAINLOOP                                                        00308001
                                    316 *                                                                        00309001
                                    317 *        SCANS THE INPUT STREAM WHICH IS IN INTERNAL CODE                00310001
                                    318 *                                                                        00311001
                                    319 *        EVERYTHING PRECEDING THE FIRST REAL ALGOL WORD WILL BE          00312001
                                    320 *        SKIPPED WITH THE HELP OF THE FALG BITS2, X'20'                  00313001
                                    321 *                                                                        00314001
000174 05A0                         322 TESTLOOP BALR  R10,0                                                     00315001
000176 189A                         323          LR    R9,R10                  RETURN ADDR FOR CIB PROGRAM       00316001
000178 1841                         324          LR    R4,R1                                                     00317001
00017A 1B22                         325          SR    R2,R2                                                     00318001
00017C DD48 1000 B872 00000 02872   326          TRT   0(73,R1),TESTTABL       SCAN INTERNAL CODE WITH TESTTABL  00319001
000182 9120 DD8F      00D8F         327          TM    BITS2,X'20'             FIRST BEGIN FOUND ?               00320001
000186 4780 51E0            001E0   328          BZ    FIRSTSTR                NO                                00321001
00018A 18F1                         329 CONT     LR    R15,R1                  FIND LENGTH OF SCANNED BYTES      00322001
00018C 1BF4                         330          SR    R15,R4                                                    00323001
00018E 4780 51AA            001AA   331          BZ    SUBROUT                                                   00324001
000192 45C0 598C            0098C   332          BAL   R12,COB                                                   00325001
000196 410F 3000            00000   333          LA    R0,0(R15,R3)                                              00326001
00019A 5900 DCDC            00CDC   334          C     R0,APE                  SPACE LEFT IN O/P BUFFER ?        00327001
00019E 4720 51B0            001B0   335          BH    MSBLOOP                                                   00328001
0001A2 06F0                         336          BCTR  R15,0                                                     00329001
0001A4 44F0 516E            0016E   337          EX    R15,EXMVC               MOVE SCANNED BYTES                00330001
0001A8 1830                         338          LR    R3,R0                   INCREASE OUTPUT POINTER           00331001
0001AA 5862 B6C4            026C4   339 SUBROUT  L     R6,BPRTAB(R2)                                             00332001
0001AE 07F6                         340          BR    R6                      BRANCH TO PROGRAM                 00333001
                                    341 *                                                                        00334001
                                    342 *        MSBLOOP                                                         00335001
                                    343 *                                                                        00336001
                                    344 *        USED WHEN SCANNED BYTES HAS TO BE PLACED IN TWO O/P AREAS       00337001
                                    345 *                                                                        00338001
0001B0 5860 DCDC            00CDC   346 MSBLOOP  L     R6,APE                                                    00339001
0001B4 1B63                         347          SR    R6,R3                                                     00340001
0001B6 0660                         348          BCTR  R6,0                                                      00341001
0001B8 4460 516E            0016E   349          EX    R6,EXMVC                MOVE TO FIRST O/P AREA            00342001
0001BC 4136 3001            00001   350          LA    R3,1(R6,R3)                                               00343001
0001C0 45C0 5992            00992   351          BAL   R12,COBSPEB             CHANGE O/P BUFFER                 00344001
0001C4 41C6 4001            00001   352          LA    R12,1(R6,R4)                                              00345001
0001C8 1BF6                         353          SR    R15,R6                                                    00346001
0001CA 06F0                         354          BCTR  R15,0                                                     00347001
0001CC 06F0                         355          BCTR  R15,0                                                     00348001
0001CE 44F0 51DA            001DA   356          EX    R15,MOVERST             MOVE TO 2ND O/P BUFFER            00349001
0001D2 413F 3001            00001   357          LA    R3,1(R15,R3)                                              00350001
0001D6 47F0 51AA            001AA   358          B     SUBROUT                 RETURN                            00351001
                                    359 *                                                                        00352001
0001DA D200 3000 C000 00000 00000   360 MOVERST  MVC   0(1,R3),0(R12)                                            00353001
0001E0 952E 1000      00000         361 FIRSTSTR CLI   0(R1),XFQUOTE           QUOTE ?                           00354001
0001E4 4780 5300            00300   362          BE    APOSTROF                                                  00355001
0001E8 952F 1000      00000         363          CLI   0(R1),XFZETA            ZETA ?                            00356001
0001EC 4780 5A28            00A28   364          BE    CIB                                                       00357001
0001F0 4110 1001            00001   365          LA    R1,1(,R1)               IF NEITHER- CONTINUE SCANNING     00358001
0001F4 47F0 5174            00174   366          B     TESTLOOP                                                  00359001
                                    367 *                                                                        00360001
                                    368 *        BLANK                                                           00361001
                                    369 *                                                                        00362001
                                    370 *        SCANS TO THE NEXT NONBLANK CHARACTER                            00363001
                                    371 *        ALL BLANK CHARACTER WILL BE SKIPPED                             00364001
                                    372 *        USED BY MAIN LOOP AND ARRAYLIST                                 00365001
                                    373 *                                                                        00366001
0001F8 4110 1001            00001   374 BLANK    LA    R1,1(,R1)               INCREASE INPUT POINTER            00367001
0001FC 952B 1000      00000         375          CLI   0(R1),XFBLANK           BLANK ?                           00368001
000200 077A                         376          BNER  R10                     NO, RETURN                        00369001
000202 4110 1001            00001   377          LA    R1,1(,R1)               YES, INCREASE INPUT POINTER       00370001
000206 1B22                         378          SR    R2,R2                                                     00371001
000208 DD48 1000 B814 00000 02814   379          TRT   0(73,R1),BTABLE         SCAN INPUT TO NEXT DELIMITER      00372001
00020E 07FA                         380          BR    R10                     RETURN                            00373001
                                    381 *                                                                        00374001
                                    382 *        TRANSOP                                                         00375001
                                    383 *                                                                        00376001
                                    384 *        CHECKS THE NEXT BYTE IN THE INPUT AREA AGAINS A                 00377001
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  Active USINGs: WORKAREA,R13  IEX11000,R5,R8,R11

  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.12

                                    385 *      KEY IE IF ( FOUND, NEXT BYTE WILL BE CHECKED FOR /, IF         00378001
                                    386 *      A SLASH IS FOUND A LEFT SQUARE BRACKET WILL BE                  00379001
                                    387 *      TRANSFERED OTHERWISE A (                                        00380001
                                    388 *      USED BY MAIN LOOP AND ARRAYLIST                                 00381001
                                    389 *                                                                      00382001
000210 4142 BBF0            02BF0   390 TRANSOP  LA    R4,KEYTAB(R2)          GET CORRECT ENTRY IN TABLE       00383001
000214 4110 1001            00001   391 INCR     LA    R1,1(,R1)                                               00384001
000218 D500 1000 4003 00000 00003   392 INCRA    CLC   0(1,R1),3(R4)          INPUT EQUAL EXPECTED ONE ?       00385001
00021E 4780 524A            0024A   393          BE    TROE                   YES, TAKE SUBSTITUTE CHAR        00386001
000222 952B 1000      00000         394          CLI   0(R1),XFBLANK          BLANK ?                          00387001
000226 4780 5214            00214   395          BE    INCR                                                    00388001
00022A 952F 1000      00000         396          CLI   0(R1),XFZETA           ZETA ?                           00389001
00022E 4770 523A            0023A   397          BNE   TRONE                  IF NEITHER TAKE CHAR IN I/P      00390001
000232 4190 5218            00218   398          LA    R9,INCRA                                                00391001
000236 47F0 5A28            00A28   399          B     CIB                                                     00392001
                                    400 *                                                                      00393001
00023A 45C0 598C            0098C   401 TRONE    BAL   R12,COB                CHECK IF O/P AREA FILLED         00394001
00023E D200 3000 4002 00000 00002   402          MVC   0(1,R3),2(R4)          TAKE CHAR FOUND IN INPUT         00395001
000244 4130 3001            00001   403          LA    R3,1(,R3)                                               00396001
000248 07FA                         404          BR    R10                    RETURN                           00397001
                                    405 *                                                                      00398001
00024A 45C0 598C            0098C   406 TROE     BAL   R12,COB                CHECK IF O/P AREA FILLED         00399001
00024E D200 3000 4001 00000 00001   407          MVC   0(1,R3),1(R4)          TAKE SUBSTITUTE CHAR FROM TABLE  00400001
000254 58C0 BDB4            02DB4   408          L     R12,BRACKET                                             00401001
000258 9528 3000      00000         409          CLI   0(R3),XFRSQBR          RIGHT SQUARE BRACKET ?           00402001
00025C 4770 5266            00266   410          BNE   TSTMORE                NO                               00403001
000260 06C0                         411          BCTR  R12,0                  YES, SUBTRACT 1 FROM CTR         00404001
000262 47F0 5272            00272   412          B     NOUPDAT                                                 00405001
                                    413 *                                                                      00406001
000266 9508 3000      00000         414 TSTMORE  CLI   0(R3),XFLSQBR          LEFT SQUARE BRACKET ?            00407001
00026A 4770 5272            00272   415          BNE   NOUPDAT                NO                               00408001
00026E 41C0 C001            00001   416          LA    R12,1(,R12)            YES, INCR COUNTER                00409001
000272 50C0 BDB4            02DB4   417 NOUPDAT  ST    R12,BRACKET                                             00410001
000276 4130 3001            00001   418          LA    R3,1(,R3)                                               00411001
00027A 4110 1001            00001   419          LA    R1,1(,R1)                                               00412001
00027E 07FA                         420          BR    R10                    RETURN                           00413001
                                    421 *                                                                      00414001
                                    422 *      RIGHTPAR                                                        00415001
                                    423 *                                                                      00416001
                                    424 *      INSERTS A ) IN O/P, SETS THE LABEL POINTERS                     00417001
                                    425 *                                                                      00418001
000280 45C0 598C            0098C   426 RIGHTPAR BAL   R12,COB                CHECK IF O/P AREA FILLED         00419001
000284 9226 3000      00000         427          MVI   0(R3),XFRBRAC          TRANSFER ) TO OUTPUT BUFFER      00420001
000288 5030 DD88            00D88   428          ST    R3,OPIN                NOTE ITS POSITION                00421001
00028C 9226 BDB2      02DB2         429          MVI   OPINCHAR,XFRBRAC                                        00422001
000290 D200 DD8C DD85 00D8C 00D85   430          MVC   OPIN+4(1),ONC          AND THE OUTPUT RECORD NUMBER     00423001
000296 4130 3001            00001   431          LA    R3,1(,R3)                                               00424001
00029A 5030 DD58            00D58   432          ST    R3,LAPIN               NOTE POSITION WHERE LETTERSTRING 00425001
00029E 4110 1001            00001   433          LA    R1,1(,R1)              MAY START                        00426001
0002A2 47F0 5174            00174   434          B     TESTLOOP                                                00427001
                                    435 *                                                                      00428001
                                    436 *      POINT                                                           00429001
                                    437 *                                                                      00430001
                                    438 *      SCANS FOR -                                                     00431001
                                    439 *      DECPOINT                                                        00432001
                                    440 *      ERROR                                                           00433001
                                    441 *      COLON                                                           00434001
                                    442 *      SEMICOLON                                                       00435001
                                    443 *      ASSIGN                                                          00436001
                                    444 *      USED BY MAIN LOOP AND ARRAYLIST                                 00437001
                                    445 *                                                                      00438001
0002A6 4110 1001            00001   446 POINT    LA    R1,1(,R1)              SCAN SOURCE STRING               00439001
0002AA 4190 52AA            002AA   447          LA    R9,*                   RETURN ADDR FOR CIB PROGRAM      00440001
0002AE 1B22                         448          SR    R2,R2                  CLEAR FUNCTION BYTE REG          00441001
0002B0 DD48 1000 B758 00000 02758   449          TRT   0(73,R1),PTTABLE       TO NEXT DELIMITER                00442001
0002B6 5862 B6C4            026C4   450          L     R6,BPRTAB(R2)          BRANCH TO SELECTED               00443001
0002BA 07F6                         451          BR    R6                     SUBROUTINE                       00444001
                                    452 *                                                                      00445001
                                    453 *      DECPOINT                                                        00446001
                                    454 *                                                                      00447001
                                    455 *      TRANSFERS A DECIMAL POINT                                       00448001
                                    456 *                                                                      00449001
0002BC 45C0 598C            0098C   457 DECPOINT BAL   R12,COB                CHECK IF O/P AREA FILLED         00450001
0002C0 923E 3000      00000         458          MVI   0(R3),XFDECPT          TRANSFER DECIMAL POINT           00451001
0002C4 4130 3001            00001   459          LA    R3,1(,R3)                                               00452001
0002C8 07FA                         460          BR    R10                                                     00453001
                                    461 *                                                                      00454001
                                    462 *      ASSIGN                                                          00455001
                                    463 *                                                                      00456001
                                    464 *      TRANSFERS A ASSIGN CHAR TO O/P                                  00457001
                                    465 *      RETURNS VIA STATEMENT                                           00458001
                                    466 *                                                                      00459001
0002CA 45C0 598C            0098C   467 ASSIGN   BAL   R12,COB                CHECK IF O/P AREA FILLED         00460001
0002CE 9216 3000      00000         468          MVI   0(R3),XFASSIGN         TRANSFER .= TO OUTPUTBUFFER      00461001
0002D2 4110 1001            00001   469          LA    R1,1(,R1)              INCR INPUT POINTER               00462001
0002D6 4130 3001            00001   470          LA    R3,1(,R3)              INCR OUTPUT POINTER              00463001
0002DA 47F0 52DE            002DE   471          B     STATE                  BRANCH TO STATEMENT PROGRAM      00464001
                                    472 *                                                                      00465001
                                    473 *      STATE                                                           00466001
                                    474 *                                                                      00467001
                                    475 *      1. CHECKS WITH PROBIT IF FIRST LABEL, FOR, IF, GOTO OR          00468001
                                    476 *         ASSIGN STATMENT AFTER A PROCEDURE                            00469001
                                    477 *      2. CHECKS THAT ALL PARAMETERS HAVE BEEN SPECIFIED               00470001
                                    478 *      3. TURNS OFF THE PROBIT AND THE BEGBIT, POSSIBLE                00471001
                                    479 *         PROCEEDING BEGIN WILL BE COMPOUND BEGIN                      00472001
                                    480 *                                                                      00473001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

0002DE 947F DD8E        00D8E          481 STATE    NI    BITS1,X'7F'            BEGBIT = 0                      00474001
0002E2 58F0 DCD8              00CD8    482          L     R15,SP                                                00475001
0002E6 950C F000        00000          483          CLI   0(R15),X'0C'           PROC IN STACK ?                 00476001
0002EA 077A                            484          BNER  R10                    IF NO RETURN                    00477001
0002EC 9214 F000        00000          485          MVI   0(R15),X'14'                                           00478001
0002F0 94BF DD8E        00D8E          486          NI    BITS1,X'BF'            PROBIT.=0                       00479001
0002F4 9500 DD8D        00D8D          487          CLI   PZ,0                   ALL PARAMETERS SPECIFIED ?      00480001
0002F8 078A                            488          BER   R10                    YES, RETURN                     00481001
0002FA 45C0 57CE              007CE    489          BAL   R12,ERROR10            NO, GENERATE E10                00482001
0002FE 07FA                            490          BR    R10                    RETURN                          00483001
                                       491 *                                                                     00484001
                                       492 *        APOSTROF                                                     00485001
                                       493 *                                                                     00486001
                                       494 *        SCANS FOR -                                                  00487001
                                       495 *        SCALE                                                        00488001
                                       496 *        BLANK                                                        00489001
                                       497 *        ZETA                                                         00490001
                                       498 *        NOT PERMITTED                                                00491001
                                       499 *        ONE MORE APOSTROPHE (DELIMITER)                              00492001
                                       500 *        R4 WILL POINT TO THE APOSTROPHE                              00493001
                                       501 *        USED BY TESTLOOP AND LIST                                    00494001
                                       502 *                                                                     00495001
000300 9200 DD81        00D81          503 APOSTROF MVI   FBYTE,0                ZERO FBYTE                      00496001
000304 1841                            504 ENTRAPR  LR    R4,R1                  R4 WILL POINT TO FIRST APOST    00497001
000306 4110 1001              00001    505          LA    R1,1(,R1)                                              00498001
00030A 0590                            506          BALR  R9,0                                                   00499001
00030C 1B22                            507          SR    R2,R2                                                  00500001
00030E DD48 1000 B7B6 00000 027B6      508          TRT   0(73,R1),ATABLE        SOURCE STRING IS SCANNED TO     00501001
                                       509 *                                 THE NEXT SIGNIFICANT DELIMITER  00502001
000314 5862 B6C4              026C4    510          L     R6,BPRTAB(R2)          R6 -> SELECTED SUBROUTINE       00503001
000318 07F6                            511          BR    R6                     BRANCH TO ROUTINE SELECTED      00504001
                                       512 *                                                                     00505001
                                       513 *        SCALE                                                        00506001
                                       514 *                                                                     00507001
                                       515 *        CORRECT ONLY DIRECT AFTER TESTLOOP OR LIST                   00508001
                                       516 *        CHECK THAT THE APOSTROPHE IS ONLY ONE CHAR IN FRONT OF       00509001
                                       517 *        DIGIT                                                        00510001
                                       518 *                                                                     00511001
00031A 91FF DD81        00D81          519 SCALE    TM    FBYTE,X'FF'                                            00512001
00031E 4710 8370              01370    520          BO    COMCEE2                COMMENT UNDER PROCESS           00513001
000322 4740 5BF0              00BF0    521          BM    TYPESPEC               DECLARATION UNDER PROCESS       00514001
000326 1861                            522 SCALEOK  LR    R6,R1                                                  00515001
000328 9120 DD8F        00D8F          523          TM    BITS2,X'20'            PROGRAM STARTED YET ?           00516001
00032C 4780 5174              00174    524          BZ    TESTLOOP               NO, RETURN                      00517001
000330 0660                            525          BCTR  R6,0                                                   00518001
000332 952E 6000        00000          526          CLI   0(R6),XFQUOTE          QUOTE ONE BYTE BEFORE SIGN      00519001
                                       527 *                                 OR DIGIT ?                      00520001
000336 4770 5B7C              00B7C    528          BNE   EROUT                  IF NO, BRANCH TO ERROR ROUTINE  00521001
00033A 45C0 598C              0098C    529          BAL   R12,COB                CHECK IF O/P AREA FILLED        00522001
00033E 923F 3000        00000          530 MOVETEN  MVI   0(R3),X'3F'            MOVE SCALE FACTOR TO OUTPUT REC 00523001
000342 4130 3001              00001    531          LA    R3,1(,R3)              INCREASE OUTPUT                 00524001
000346 07FA                            532          BR    R10                    RETURN                          00525001
                                       533 *                                                                     00526001
                                       534 *        BLKAPOS                                                      00527001
                                       535 *                                                                     00528001
                                       536 *        SHIFT THE BLANK OR BLANKS AWAY AND MOVES THE QUOTE           00529001
                                       537 *        AND VALID CHARACTERS UP TO THE RIGHT                         00530001
                                       538 *                                                                     00531001
                                       539 *        SETS R4 TO POINT NEW LOCATION OF THE QUOTE                   00532001
                                       540 *        USED BY MAINLOOP AND INDIRECT BY THE ARRYLIST AND THE        00533001
                                       541 *        NPAFTAPO                                                     00534001
                                       542 *                                                                     00535001
000348 18F1                            543 BLKAPOS  LR    R15,R1                 NOTE POSITION OF FIRST BLANK    00536001
00034A DD48 1000 B814 00000 02814      544 BLKAPOSA TRT   0(73,R1),BTABLE                                        00537001
000350 1861                            545          LR    R6,R1                  CALC NUMBER OF BLANKS           00538001
000352 1B6F                            546          SR    R6,R15                 NUMBER OF BLANKS IN R6          00539001
000354 18EF                            547          LR    R14,R15                                                00540001
000356 1BE4                            548          SR    R14,R4                                                 00541001
000358 59E0 BD38              02D38    549          C     R14,KF11               BYTES EXCEED THE LIMIT ALREADY ? 00542001
00035C 4720 5B7C              00B7C    550          BH    EROUT                                                  00543001
000360 06E0                            551          BCTR  R14,0                  NUMBER OF BYTES TO BE SHIFTED   00544001
000362 41F6 4000              00000    552          LA    R15,0(R6,R4)           COMPUTE NEW POSITION OF QUOTE   00545001
000366 44E0 5372              00372    553          EX    R14,MAPOS              MOVE QUOTE AND SCANNED CHARS    00546001
00036A 44E0 5378              00378    554          EX    R14,MAPOS2                                             00547001
00036E 184F                            555          LR    R4,R15                 NOTE NEW POSITION OF QUOTE      00548001
000370 07F9                            556          BR    R9                     RETURN                          00549001
                                       557 *                                                                     00550001
000372 D200 537E 4000 0037E 00000      558 MAPOS    MVC   BUCKET(1),0(R4)                                        00551001
000378 D200 F000 537E 00000 0037E      559 MAPOS2   MVC   0(1,R15),BUCKET                                        00552001
                                       560 *                                                                     00553001
00037E 0000000000000000                561 BUCKET   DC    11X'00'                                                00554001
                                       562 *                                                                     00555001
                                       563 *        ZETAAPO                                                      00556001
                                       564 *                                                                     00557001
                                       565 *        MOVES SCANNED BYTES AND APOSTROPHE IN FRONT OF WA AND        00558001
                                       566 *        PUTS R4 TO NEW START LOCATION OF POSSIBLE DELIMITER          00559001
                                       567 *        USED BY MAINLOOP AND ARRAYLIST                               00560001
                                       568 *                                                                     00561001
000389 00
00038A 18F4                            569 ZETAAPO  LR    R15,R4                 COMPUTE                         00562001
00038C 18E1                            570          LR    R14,R1                 NUMBER OF SCANNED               00563001
00038E 1BE4                            571          SR    R14,R4                 BYTES                           00564001
000390 59E0 BD38              02D38    572          C     R14,KF11               EXCEED LIMIT ?                  00565001
000394 4720 5B7C              00B7C    573          BH    EROUT                  YES                             00566001
000398 4140 DCF3              00CF3    574          LA    R4,WA                  NO, CALCULATE WHERE TO MOVE     00567001
00039C 1B4E                            575          SR    R4,R14                 CHAR STRING                     00568001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

00039E 06E0                          576          BCTR  R14,0                                              00569001
0003A0 44E0 53A8               003A8 577          EX    R14,MOVBEFWA            MOVE CHAR IN FRONT OF WA   00570001
0003A4 47F0 5A28               00A28 578          B     CIB                     CHANGE INPUT BUFFER        00571001
                                     579 *                                                                 00572001
0003A8 D200 4000 F000 00000 00000    580 MOVBEFWA MVC   0(1,R4),0(R15)                                     00573001
                                     581 *                                                                 00574001
                                     582 *        NPAFAPO                                                  00575001
                                     583 *                                                                 00576001
                                     584 *        GIVES ERROR MESSAGE AND UTILIZES BLANKAPO TO SHIFT THE   00577001
                                     585 *        INVALID CHARACTER AWAY                                   00578001
                                     586 *        USED BY MAINLOOP AND ARRAYLIST                           00579001
                                     587 *                                                                 00580001
0003AE 91FF DD81         00D81       588 NPAFTAPO TM    FBYTE,X'FF'                                        00581001
0003B2 4740 5BF0               00BF0 589          BM    TYPESPEC                INVALID IDENTIFIER         00582001
0003B6 4710 836C               0136C 590          BO    COMCED2                 COMMENT UNDER PROCESS      00583001
0003BA 9120 DD8F         00D8F       591          TM    BITS2,X'20'             PROGRAM STARTED YET ?      00584001
0003BE 4780 53C8               003C8 592          BZ    NPAFTAPA                NO, BYPASS ERROR MSG       00585001
0003C2 4560 578A               0078A 593          BAL   R6,ERR7                                            00586001
                                     594 *                                                                 00587001
0003C6 0401                          595          DC    X'0401'                 E1                         00588001
                                     596 *                                                                 00589001
0003C8 18F1                          597 NPAFTAPA LR    R15,R1                                             00590001
0003CA 4110 1001               00001 598          LA    R1,1(,R1)               GOTO BLKAPOS TO SHIFT AWAY 00591001
0003CE 47F0 534A               0034A 599          B     BLKAPOSA                INVALID CHARACTER          00592001
                                     600 *                                                                 00593001
                                     601 *        COLON                                                    00594001
                                     602 *                                                                 00595001
                                     603 *        ENTERD FROM MAINLOOP OR POINT                            00596001
                                     604 *        CHECKS FOR    :=  ASSIGN                                 00597001
                                     605 *                      :(  DELIMITER                              00598001
                                     606 *                          LABEL                                  00599001
                                     607 *                                                                 00600001
0003D2 1861                          608 COLON    LR    R6,R1                   STORE PRECEEDING 6 CHARACTERS   00601001
0003D4 5B60 BD24               02D24 609          S     R6,KF6                  TO BE USED ONLY IF INCORRECT    00602001
0003D8 D205 537E 6000 0037E 00000    610          MVC   BUCKET(6),0(R6)         USE OF COLON E3            00603001
0003DE 4110 1001               00001 611 COLON2   LA    R1,1(,R1)               R1 -> NEXT INPUT CHAR      00604001
0003E2 9510 1000         00000       612 EQUAL    CLI   0(R1),XFEQUAL           COLON FOLLOWED BY EQUAL SIGN ?  00605001
0003E6 4780 52CA               002CA 613          BE    ASSIGN                  BRANCH TO ASSIGN PROGRAM   00606001
0003EA 9506 1000         00000       614          CLI   0(R1),XFLBRAC           COLON FOLLOWED BY LEFT BRACKET ? 00607001
0003EE 4780 552E               0052E 615          BE    LETDEL                  BRANCH TO DELIMITER PROCESSING  00608001
0003F2 952B 1000         00000       616          CLI   0(R1),XFBLANK           COLON FOLLOWED BY BLANK ?  00609001
0003F6 4780 53DE               003DE 617          BE    COLON2                  REPEAT SEARCH              00610001
0003FA 952F 1000         00000       618          CLI   0(R1),XFZETA            COLON FOLLOWED BY ZETA ?   00611001
0003FE 4770 540A               0040A 619          BNE   LABEL01                 NO, BRANCH TO LABEL PROCESSING  00612001
000402 4190 53E2               003E2 620          LA    R9,EQUAL                YES, PROVIDE RETURN ADDR   00613001
000406 47F0 5A28               00A28 621          B     CIB                     GET NEW INPUT BUFFER       00614001
                                     622 *                                                                 00615001
                                     623 *        LABEL                                                    00616001
                                     624 *                                                                 00617001
                                     625 *        OPIN POINTS TO LAST OPERATOR WHICH MIGHT BE              00618001
                                     626 *        FOLLOWED BY A LABEL                                      00619001
                                     627 *        R14 IS THE POINTER, STEPPING UP BETWEEN LAPIN AND        00620001
                                     628 *        THE COLON POINTED TO BY R3                               00621001
                                     629 *        OPIN+4 CONTAINS THE O/P REC NUMBER WHEN OPIN WAS SET     00622001
                                     630 *        LABEL IS CHECKED FOR VALIDITY. THE FIRST 6 CHAR          00623001
                                     631 *        ARE MOVED TO OUTPUT AND ITAB                             00624001
                                     632 *        CHECKS IF THE LABEL IS SPLIT OVER MORE THAN ONE          00625001
                                     633 *        O/P BUFFER                                               00626001
                                     634 *                                                                 00627001
                                     635 *        IF THE LABEL IS SPLIT BY ONE O/P BUFFER END THE HANDLING 00628001
                                     636 *        IS THE SAME AS IF NOT EXECPT THAT WHEN ZETA              00629001
                                     637 *        IS FOUND R14 IS UPDATED TO THE FIRST CHARACTER OF THE    00630001
                                     638 *        CURRENT O/P REC                                          00631001
                                     639 *                                                                 00632001
                                     640 *        E3 IF THERE IS NO LABEL                                  00633001
                                     641 *        E6 IF LABEL LONGER THAN 1024 BYTES                       00634001
                                     642 *        E7 IF LABEL CONTAINS INVALID CHARACTER                   00635001
                                     643 *        E8 IF LABEL STARTS WITH INVALID CHAR                     00636001
                                     644 *                                                                 00637001
00040A D500 DD85 DD8C 00D85 00D8C    645 LABEL01  CLC   ONC,OPIN+4              LABEL EXCEEDS ONE O/P REC ?     00638001
000410 4780 542E               0042E 646          BE    LABEL                   NO                         00639001
000414 1B44                          647          SR    R4,R4                                              00640001
000416 4340 DD8C               00D8C 648          IC    R4,OPIN+4                                          00641001
00041A 4140 4001               00001 649          LA    R4,1(,R4)                                          00642001
00041E 4320 DD85               00D85 650          IC    R2,ONC                                             00643001
000422 1924                          651          CR    R2,R4                   LABEL EXCEEDS 2 O/P REC ?  00644001
000424 4780 542E               0042E 652          BE    LABEL                   NO                         00645001
000428 4560 5724               00724 653          BAL   R6,ERR4                                            00646001
                                     654 *                                                                 00647001
00042C 0406                          655          DC    X'0406'                 TERMINATING ERROR          00648001
                                     656 *                                                                 00649001
00042E 58E0 DD58               00D58 657 LABEL    L     R14,LAPIN                                          00650001
000432 193E                          658          CR    R3,R14                  ANY IDENTIFIER ?           00651001
000434 4780 570A               0070A 659          BE    ERROR3                  E3 COLON DELETED           00652001
000438 9526 BDB2         02DB2       660          CLI   OPINCHAR,XFRBRAC        LABEL PROCEEDED BY RIGHT BRACK ? 00653001
00043C 4780 570A               0070A 661          BE    ERROR3                  YES, E3 IS GIVEN           00654001
000440 9540 E000         00000       662 LABNAME  CLI   0(R14),XFA              FIRST CHAR SPECIAL OR NUMERIC ? 00655001
000444 4740 5492               00492 663          BL    LABNAMER                YES, BRANCH, NOT LETTER    00656001
000448 5870 DD68               00D68 664          L     R7,AITL                 NO, LETTER                 00657001
00044C D200 7000 E000 00000 00000    665          MVC   0(1,R7),0(R14)          MOVE CONTENTS OF R14 TO ITAB    00658001
000452 4170 7001               00001 666          LA    R7,1(,R7)               INCR R7                    00659001
000456 4120 0001               00001 667          LA    R2,1                    INITIALIZE R2 WITH 1       00660001
00045A 41E0 E001               00001 668 LABID    LA    R14,1(,R14)             GET NEXT CHAR              00661001
00045E 19E3                          669          CR    R14,R3                  R14 = R3 ?                 00662001
000460 4780 54C4               004C4 670          BE    LABEND                                             00663001
000464 952F E000         00000       671 LABCHECK CLI   0(R14),XFZETA           ZETA ?                     00664001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

000468 4770 5474              00474   672          BNE   LABCHK1               NO, BRANCH                   00665001
00046C 58E0 DD74              00D74   673          L     R14,WADDARI           GET START OF CURRENT O/P AREA  00666001
000470 47F0 5464              00464   674          B     LABCHECK                                           00667001
                                      675 *                                                             00668001
000474 4740 54B4              004B4   676 LABCHK1  BL    ERROR7                                             00669001
000478 5920 BD24              02D24   677          C     R2,KF6                R2 = 6 ?                     00670001
00047C 4780 545A              0045A   678          BE    LABID                 YES, DON'T MOVE MORE CHAR TO 00671001
                                      679 *                                    ITAB                         00672001
000480 D200 7000 E000 00000 00000     680          MVC   0(1,R7),0(R14)        MOVE CONTENT OF PINTOIN      00673001
000486 4170 7001              00001   681          LA    R7,1(,R7)             INCR R7, R2                  00674001
00048A 4120 2001              00001   682          LA    R2,1(,R2)                                          00675001
00048E 47F0 545A              0045A   683          B     LABID                                              00676001
                                      684 *                                                             00677001
000492 952F E000        00000         685 LABNAMER CLI   0(R14),XFZETA         ZETA ?                       00678001
000496 4770 54A2              004A2   686          BNE   LABNAM01              NO, BRANCH                   00679001
00049A 58E0 DD74              00D74   687          L     R14,WADDARI           UPDATE R14 TO CURRENT O/P BUFFER 00680001
00049E 47F0 5440              00440   688          B     LABNAME                                            00681001
                                      689 *                                                             00682001
0004A2 952B E000        00000         690 LABNAM01 CLI   0(R14),XFBLANK        BLANK ?                      00683001
0004A6 4780 5440              00440   691          BE    LABNAME               YES, BRANCH                  00684001
0004AA 4560 578A              0078A   692          BAL   R6,ERR7                                            00685001
                                      693 *                                                             00686001
0004AE 0408                           694          DC    X'0408'               E8                           00687001
                                      695 *                                                             00688001
0004B0 47F0 54BA              004BA   696          B     ERROR7A                                            00689001
                                      697 *                                                             00690001
0004B4 4560 56CC              006CC   698 ERROR7   BAL   R6,ERR2                                            00691001
                                      699 *                                                             00692001
0004B8 0007                           700          DC    X'0007'               E7 INCORRECT LABEL           00693001
                                      701 *                                                             00694001
0004BA 58F0 DD68              00D68   702 ERROR7A  L     R15,AITL                                           00695001
0004BE 45C0 5962              00962   703          BAL   R12,ITABCLEC          CLEAR THE ITAB ENTRY         00696001
0004C2 07FA                           704          BR    R10                                                00697001
                                      705 *                                                             00698001
                                      706 *        LABEND                                                 00699001
                                      707 *                                                             00700001
                                      708 *        IF (LABEL:LABELX) THE LN (LABEL NUMBER) WILL ONLY BE   00701001
                                      709 *        INCREASED ONCE                                         00702001
                                      710 *        INTERNAL NAME IS CREATED AND LN INSERTED               00703001
                                      711 *        X'27' IS MOVED TO THE O/P TO INDICATE LABEL OPIN,      00704001
                                      712 *        OPIN+4 AND LAPIN ARE UPDATED                           00705001
                                      713 *        ITABCLEA IS ACTIVATED TO PREPARE NEXT ITABENTRY        00706001
                                      714 *                                                             00707001
0004C4 9527 BDB2        02DB2         715 LABEND   CLI   OPINCHAR,XFLABEL      +. LABEL PRECEEDED BY LABEL  00708001
0004C8 4780 54EC              004EC   716          BE    LABLAHEI              YES, DO NOT UPDATE LN        00709001
0004CC 48F0 D0A2              000A2   717          LH    R15,LN                LN = LN+4                    00710001
0004D0 41F0 F004              00004   718          LA    R15,4(,R15)                                        00711001
0004D4 D501 D0A2 BD58 000A2 02D58     719 LABCREAT CLC   LN(2),KH4096          LN = 2**12 ?                 00712001
0004DA 4740 54E8              004E8   720          BL    LABCRT01                                           00713001
0004DE 4560 578A              0078A   721          BAL   R6,ERR7                                            00714001
                                      722 *                                                             00715001
0004E2 04D8                           723          DC    X'04D8'               E216                         00716001
                                      724 *                                                             00717001
0004E4 41F0 006C              0006C   725          LA    R15,LATBEG            RESET LN                     00718001
0004E8 40F0 D0A2              000A2   726 LABCRT01 STH   R15,LN                                             00719001
0004EC 58F0 DD68              00D68   727 LABLAHEI L     R15,AITL                                           00720001
0004F0 92CC F006        00006         728          MVI   6(R15),X'CC'          CREATE INTERNAL NAME         00721001
0004F4 9208 F007        00007         729          MVI   7(R15),X'08'                                       00722001
0004F8 58E0 DD70              00D70   730          L     R14,LPBP                                           00723001
0004FC D200 F008 E00A 00008 0000A     731          MVC   8(1,R15),10(R14)      PROGRAM BLOCK NR AITL + 7    00724001
000502 D201 F009 D0A2 00009 000A2     732          MVC   9(2,R15),LN           LN IN AITL+9                 00725001
000508 45C0 598C              0098C   733          BAL   R12,COB               CHECK IF O/P AREA FILLED     00726001
00050C 9227 3000        00000         734          MVI   0(R3),XFLABEL         MOVE LABEL IND TO O/P        00727001
000510 5030 DD88              00D88   735          ST    R3,OPIN               SET LABEL POINTERS           00728001
000514 9227 BDB2        02DB2         736          MVI   OPINCHAR,XFLABEL                                   00729001
000518 D200 DD8C DD85 00D8C 00D85     737          MVC   OPIN+4(1),ONC                                      00730001
00051E 4130 3001              00001   738          LA    R3,1(,R3)                                          00731001
000522 5030 DD58              00D58   739          ST    R3,LAPIN                                           00732001
000526 45C0 595A              0095A   740          BAL   R12,ITABCLEA          CHECK AND CLEAR NEXT ITABENTRY 00733001
00052A 47F0 52DE              002DE   741          B     STATE                 RETURN VIA STATEMENT PCM     00734001
                                      742 *                                                             00735001
                                      743 *        LETDEL                                                 00736001
                                      744 *                                                             00737001
                                      745 *        :( HAS BEEN FOUND IN THE I/P                           00738001
                                      746 *        IF OPIN POINTS TO A RIGHT PARENTHESIS IT SHOULD BE     00739001
                                      747 *        LETTER DELIMITER, WHICH SHOULD BE REMOVED AND REPLACED 00740001
                                      748 *        BY A COMMA                                             00741001
                                      749 *        IT IS CHECKED THAT ALL CHARACTERS ARE LETTERS OTHERWISE 00742001
                                      750 *        E3 IS GIVEN                                            00743001
                                      751 *                                                             00744001
00052E 9526 BDB2        02DB2         752 LETDEL   CLI   OPINCHAR,XFRBRAC      OPIN POINTS TO A RIGHT BRACKET ? 00745001
000532 4770 570A              0070A   753          BNE   ERROR3                NO, E3, COLON DELETED        00746001
000536 D500 DD85 DD8C 00D85 00D8C     754          CLC   ONC(1),OPIN+4         LETDEL EXCEEDS ONE O/P REC ? 00747001
00053C 4770 5576              00576   755          BNE   LETDELB2              YES                          00748001
000540 58E0 DD88              00D88   756          L     R14,OPIN                                           00749001
000544 4160 E001              00001   757          LA    R6,1(,R14)                                         00750001
000548 1963                           758          CR    R6,R3                 AT LEAST ONE CHAR ?          00751001
00054A 4780 570A              0070A   759          BE    ERROR3                NO, E3 DELETE COLON          00752001
00054E 41E0 E001              00001   760 LETDELE1 LA    R14,1(,R14)           OTHER CHAR THAN              00753001
000552 9539 E000        00000         761          CLI   0(R14),XF9            LETTERS ?                    00754001
000556 47D0 570A              0070A   762          BNH   ERROR3                                             00755001
00055A 4160 E001              00001   763          LA    R6,1(,R14)                                         00756001
00055E 1963                           764          CR    R6,R3                 ALL CHAR CHECKED ?           00757001
000560 4770 554E              0054E   765          BNE   LETDELE1              NO, CHECK NEXT               00758001
000564 5830 DD88              00D88   766          L     R3,OPIN               SET O/P POINTER TO BEGINING OF 00759001
000568 9225 3000        00000         767          MVI   0(R3),XFCOMMA         THE STRING, MOVE IN A COMMA  00760001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

00056C 4130 3001             00001   768            LA    R3,1(,R3)                                        00761001
000570 4110 1001             00001   769            LA    R1,1(,R1)              GET NEXT CHAR             00762001
000574 07FA                          770            BR    R10                                              00763001
                                     771 *                                                                 00764001
                                     772 *          DELIMITER EXCEEDS ONE O/P RECORD                       00765001
                                     773 *                                                                 00766001
000576 1B66                          774 LETDELB2 SR    R6,R6                  DOES THE STRING           00767001
000578 4360 DD8C             00D8C   775            IC    R6,OPIN+4              EXCEED 2 O/P RECORDS ?    00768001
00057C 4160 6001             00001   776            LA    R6,1(,R6)                                        00769001
000580 4320 DD85             00D85   777            IC    R2,ONC                                           00770001
000584 1962                          778            CR    R6,R2                                            00771001
000586 4780 5590             00590   779            BE    LETDEL01               NO                        00772001
00058A 4560 5724             00724   780            BAL   R6,ERR4                                          00773001
                                     781 *                                                                 00774001
00058E 0404                          782            DC    X'0404'                E4  GOES TO COMPFIN       00775001
                                     783 *                                                                 00776001
000590 58E0 DD88             00D88   784 LETDEL01 L     R14,OPIN               MAKE R14 POINT TO LETTER DEL 00777001
000594 41E0 E001             00001   785 LETDELB3 LA    R14,1(,R14)                                      00778001
000598 9540 E000       00000         786            CLI   0(R14),XFA             LETTER ?                  00779001
00059C 47B0 5594             00594   787            BNL   LETDELB3               YES                       00780001
0005A0 952F E000       00000         788            CLI   0(R14),XFZETA          NO, ZETA ?                00781001
0005A4 4770 570A             0070A   789            BNE   ERROR3                                           00782001
0005A8 58E0 DD74             00D74   790            L     R14,WADDARI            CHANGE BACK SO R14 POINT  00783001
                                     791 *                                   TO CURR.O/P               00784001
0005AC 9540 E000       00000         792 LETDELF4 CLI   0(R14),XFA             LETTER ?                  00785001
0005B0 4740 570A             0070A   793            BL    ERROR3                 E3 DELETE COLON           00786001
0005B4 41E0 E001             00001   794            LA    R14,1(,R14)            SKIP ALL LETTERS          00787001
0005B8 19E3                          795            CR    R14,R3                 UNTIL END OF DELIMITERS   00788001
0005BA 4770 55AC             005AC   796            BNE   LETDELF4                                         00789001
0005BE 5830 DD74             00D74   797            L     R3,WADDARI             LOAD ADDR OF CURRENT O/P REC 00790001
0005C2 923D 3000       00000         798            MVI   0(R3),X'3D'            MOVE IN $ RHO             00791001
0005C6 4130 3001             00001   799            LA    R3,1(,R3)                                        00792001
0005CA 4110 1001             00001   800            LA    R1,1(,R1)              GET NEXT CHAR             00793001
0005CE 07FA                          801            BR    R10                                              00794001
                                     802 *                                                                 00795001
                                     803 *          SEMCO                                                  00796001
                                     804 *                                                                 00797001
                                     805 *          IF THE DELTA BIT IS ON, THE DELTA AND SEMICOLON COUNTER 00798001
                                     806 *          (SEMCNT) IS MOVED TO THE OUTPUT                        00799001
                                     807 *          IF THE DELTABIT IS OFF THE STACK IS INSPECTED          00800001
                                     808 *                                                                 00801001
                                     809 *          BEGIN, BETA OR PROC* -                                 00802001
                                     810 *          A SEMICOLON AND THE SEMCNT IS MOVED TO THE O/P AND     00803001
                                     811 *          PROCESSING IS CONTINUES VIA TEST                       00804001
                                     812 *                                                                 00805001
                                     813 *          FOR -                                                  00806001
                                     814 *          THE FORSTATMENT IS COMPLETE, THE FOREND PROGRAM IS     00807001
                                     815 *          ACTIVATED                                              00808001
                                     816 *          THE RETURN IS TO STACKTST TO SEE IF ONE MORE FOR       00809001
                                     817 *          STATEMENT OR A PROC** HAS ENDED AT THE SAME TIME       00810001
                                     818 *                                                                 00811001
                                     819 *          PROC -                                                 00812001
                                     820 *          A PROCEDURE CONSISTING OF ONLY ONE STATMENT OR A DUMMY 00813001
                                     821 *          STATMENT HAS ENDED IT IS CHECKED THAT ALL PARAMETERS   00814001
                                     822 *          HAVE BEEN SPECIFIED, AND THE PROC** PGM IS JOINED      00815001
                                     823 *                                                                 00816001
                                     824 *          PROC** -                                               00817001
                                     825 *          A PROCEDURE CONSISTING OF ONE LABELED STATEMENT OR ONE 00818001
                                     826 *          FOR, IF, GOTO OR ASSIGN STATEMENT HAS ENDED            00819001
                                     827 *          THE PROGRAM BLOCKEND PROGRAM IS ACTIVATED AND A DELTA  00820001
                                     828 *          AND THE SEMCNT IS MOVED OUT                            00821001
                                     829 *                                                                 00822001
                                     830 *          THE FINAL EXIT IS IN ALL CASES TO TEST                 00823001
                                     831 *                                                                 00824001
0005D0 9602 D082       00082         832 SEMC60   OI    COMPFLGS+2,SET60       SET SWITCH FOR 60 CHAR SET 00825001
0005D4 4840 D09C             0009C   833 SEMCO    LH    R4,SEMCNT                                        00826001
0005D8 5940 BE3C             02E3C   834            C     R4,SCOVFL              TEST SEMICOLON OVERFLOW   00827001
0005DC 4740 55EC             005EC   835            BL    SEMCO01                                          00828001
0005E0 4560 578A             0078A   836            BAL   R6,ERR7                                          00829001
                                     837 *                                                                 00830001
0005E4 0411                          838            DC    X'0411'                E17                       00831001
                                     839 *                                                                 00832001
0005E6 D201 D09C BD0C 0009C 02D0C    840            MVC   SEMCNT,KF0             ZERO SEMICOLON COUNT      00833001
0005EC 4140 4001             00001   841 SEMCO01  LA    R4,1(,R4)              INCR SEMICOLON COUNTER    00834001
0005F0 4040 D09C             0009C   842            STH   R4,SEMCNT                                        00835001
0005F4 4100 3003             00003   843            LA    R0,3(,R3)              PROVIDE 3 BYTES IN OUTPUT BUF 00836001
0005F8 45C0 5982             00982   844            BAL   R12,COBSPEC            CHECK IF ENOUGH SPACE IN O/P 00837001
0005FC 94BF DD90       00D90         845            NI    BITS3,FMOFF                                      00838001
000600 9120 DD8E       00D8E         846            TM    BITS1,X'20'            TEST DELTABIT             00839001
000604 4710 5638             00638   847            BO    DELTA                  ON, BRANCH TO DELTA TRANSFER 00840001
000608 4140 5694             00694   848            LA    R4,STACKTST            RETURN REG (FOREND, PBLCKEND) 00841001
00060C 58F0 DCD8             00CD8   849            L     R15,SP                                           00842001
000610 4320 F000             00000   850            IC    R2,0(,R15)             SELECT BRANCH ADDR        00843001
000614 5862 561C             0061C   851            L     R6,PROG2(R2)           DEPENDING ON WHAT IS IN STACK 00844001
000618 07F6                          852            BR    R6                                               00845001
                                     853 *                                                                 00846001
00061A 0000
00061C 0000079A                      854 PROG2    DC    A(ERR8)                +00 ALPHA   SHOULD NOT OCCUR 00847001
000620 00000644                      855            DC    A(SCTRANS)             +04 BETA                  00848001
000624 00000644                      856            DC    A(SCTRANS)             +08 BEGIN                 00849001
000628 00000670                      857            DC    A(SEMPROC)             +12 PROC                  00850001
00062C 00000644                      858            DC    A(SCTRANS)             +16 PROC*                 00851001
000630 00000680                      859            DC    A(SEMPROC2)            +20 PROC**                00852001
000634 00000F4A                      860            DC    A(FOREND)              +24 FOR                   00853001
                                     861 *                                                                 00854001
000638 94DF DD8E       00D8E         862 DELTA    NI    BITS1,X'DF'            DELTA BIT= 0              00855001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

00063C 9229 3000       00000          863          MVI   0(R3),XFDELTA          TRANSFER DELTA                   00856001
000640 47F0 5648             00648    864          B     SCTRANSA                                                00857001
                                      865 *                                                                      00858001
000644 920B 3000       00000          866 SCTRANS  MVI   0(R3),XFSCOLON         TRANSFER SEMICOLON               00859001
000648 920B BDB2       02DB2          867 SCTRANSA MVI   OPINCHAR,XFSCOLON                                       00860001
00064C 5030 DD88             00D88    868          ST    R3,OPIN                NOTE POS OF SEMICOLON IN OPIN    00861001
000650 D200 DD8C DD85 00D8C 00D85     869          MVC   OPIN+4(1),ONC          AND O/P NO                       00862001
000656 D201 3001 D09C 00001 0009C     870          MVC   1(2,R3),SEMCNT         TRANSFER SEMICOLON COUNTER       00863001
00065C 4130 3003             00003    871          LA    R3,3(,R3)              INCREASE OUTPUT POINTER          00864001
000660 5030 DD58             00D58    872          ST    R3,LAPIN                                                00865001
000664 947F DD8E       00D8E          873          NI    BITS1,X'7F'            BEGBIT.=0                        00866001
000668 4110 1001             00001    874          LA    R1,1(,R1)              INCREASE INPUT POINTER           00867001
00066C 47F0 5174             00174    875          B     TESTLOOP                                                00868001
                                      876 *                                                                      00869001
000670 94BF DD8E       00D8E          877 SEMPROC  NI    BITS1,X'BF'            PROBIT.=0                        00870001
000674 9500 DD8D       00D8D          878          CLI   PZ,0                   ALL PARAMETERS SPECIFIED         00871001
000678 4780 5680             00680    879          BE    SEMPROC2                                                00872001
00067C 45C0 57CE             007CE    880          BAL   R12,ERROR10                                             00873001
000680 4540 5FB8             00FB8    881 SEMPROC2 BAL   R4,PBLCKEND                                             00874001
000684 4100 3003             00003    882          LA    R0,3(,R3)              PROVIDE 3 BYTES IN OUTPUT BUF    00875001
000688 45C0 5982             00982    883          BAL   R12,COBSPEC            CHECK IF ENOUGH SPACE IN O/P     00876001
00068C 9229 3000       00000          884          MVI   0(R3),XFDELTA          TRANSFER DELTA                   00877001
000690 47F0 5648             00648    885          B     SCTRANSA                                                00878001
                                      886 *                                                                      00879001
000694 9514 F000       00000          887 STACKTST CLI   0(R15),X'14'                                            00880001
000698 4780 5680             00680    888          BE    SEMPROC2               PROC**                           00881001
00069C 4720 5F4A             00F4A    889          BH    FOREND                 FOR                              00882001
0006A0 4100 3003             00003    890          LA    R0,3(,R3)                                               00883001
0006A4 45C0 5982             00982    891          BAL   R12,COBSPEC            CHECK IF ENOUGH SPACE IN O/P     00884001
0006A8 47F0 5644             00644    892          B     SCTRANS                                                 00885001
                                      893 *                                                                      00886001
                                      894 *        ERROR ROUTINE                                                 00887001
                                      895 *                                                                      00888001
                                      896 *        GENERATES ERROR PATTERNS                                      00889001
                                      897 *                                                                      00890001
                                      898 *        MAINLY CLOSED SUBROUTINES, ENTERED WITH BAL R6                00891001
                                      899 *        FOLLOWED BY TWO BYTES. FIRST BYTE SPECIFIES THE LENGTH,       00892001
                                      900 *        IF KNOW AND SECOND BYTE ERROR NUMBER.                         00893001
                                      901 *        USES ERROR1 TO CHECK FOR ERRORPOL OVERFLOW AND TO             00894001
                                      902 *        INSERT NUMBER, LENGTH AND SEMCNT                              00895001
                                      903 *                                                                      00896001
                                      904 *        ERR0                                                          00897001
                                      905 *                                                                      00898001
                                      906 *        GENERATES E212 PATTERN                                        00899001
                                      907 *        EXITS TO COMFIN                                               00900001
                                      908 *                                                                      00901001
0006AC 9202 F000       00000          909 ERR0     MVI   0(R15),X'02'                                            00902001
0006B0 92D4 F001       00001          910          MVI   1(R15),X'D4'           E212                             00903001
0006B4 41F0 F002             00002    911          LA    R15,2(,R15)                                             00904001
0006B8 50F0 D0C0             000C0    912          ST    R15,NEXTERR                                             00905001
0006BC 47F0 5728             00728    913          B     COMPFIN                                                 00906001
                                      914 *                                                                      00907001
                                      915 *        ERR1                                                          00908001
                                      916 *                                                                      00909001
                                      917 *        E1                                                            00910001
                                      918 *        ACTIVATES ERR7, SKIPS INVALID CHARACTER AND RETURNS TO        00911001
                                      919 *        EITHER TESTLOOP OR LIST                                       00912001
                                      920 *        ENTERED VIA BPRTAB WHEN USED BY TESTLOOP OR LIST              00913001
                                      921 *        INVALID CHARACTER FOLLOWING AN APOSTROPHE IS TREATED          00914001
                                      922 *        SPECIALLY IN NPAFTAPO                                         00915001
                                      923 *                                                                      00916001
0006C0 4560 578A             0078A    924 ERR1     BAL   R6,ERR7                NOT PERMITTED CHARACTER          00917001
                                      925 *                                                                      00918001
0006C4 0401                           926          DC    X'0401'                E1                               00919001
                                      927 *                                                                      00920001
0006C6 4110 1001             00001    928          LA    R1,1(,R1)                                               00921001
0006CA 07FA                           929          BR    R10                    RETURN TO TEST OR TRATE          00922001
                                      930 *                                                                      00923001
                                      931 *        ERR2                                                          00924001
                                      932 *                                                                      00925001
                                      933 *        ERR2       7, 16, 31, 32, 33, 34                              00926001
                                      934 *             ENTERED   ERROR7, IER, ARRAYERR, SWITCHERR               00927001
                                      935 *                       SLASHERR, SEMCLST, SEMCLER, ARRYSLSH           00928001
                                      936 *                       SLASHLST, PNAMERR                              00929001
                                      937 *             NAME TAKE FROM AITL                                      00930001
                                      938 *        ERR2B          10, 36, 37                                     00931001
                                      939 *                       ERROR10, PROCFIN, ERROP37                      00932001
                                      940 *             NAME TAKEN FROM LPBP-11                                  00933001
                                      941 *        ERR2C      14                                                 00934001
                                      942 *                       EROUT                                          00935001
                                      943 *             DELIMITER TAKEN FROM BUCKET                              00936001
                                      944 *        ERR2E      16, 26, 27, 30                                     00937001
                                      945 *                       IDVALCHK, VALDLB2, IDSELSE, NOTFOUND           00938001
                                      946 *             NAME TAKEN FROM IDBUCKET                                 00939001
                                      947 *        ERR2D UTILISES ERROR2 TO FIND LENGTH                          00940001
                                      948 *                       ERROR1 TO CREATE MESSAGE                       00941001
                                      949 *                       MOVES IN INFORMATION                           00942001
                                      950 *                       RETURNS TO CALLING SEQUENCE                    00943001
                                      951 *                                                                      00944001
0006CC 5870 DD68             00D68    952 ERR2     L     R7,AITL                NAME FROM AITL                   00945001
0006D0 47F0 56F2             006F2    953          B     ERR2D                                                   00946001
                                      954 *                                                                      00947001
0006D4 5870 DD70             00D70    955 ERR2B    L     R7,LPBP                NAME FRM LPBP-11                 00948001
0006D8 5B70 BD38             02D38    956          S     R7,KF11                                                 00949001
0006DC 47F0 56F2             006F2    957          B     ERR2D                                                   00950001
                                      958 *                                                                      00951001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.12

0006E0 D205 537E 4001 0037E 00001   959 ERR2C    MVC   BUCKET(6),1(R4)         DELIMITER FROM BUCKET            00952001
0006E6 4170 537E            0037E   960          LA    R7,BUCKET                                                00953001
0006EA 47F0 56F2            006F2   961          B     ERR2D                                                    00954001
                                    962 *                                                                       00955001
0006EE 4170 873E            0173E   963 ERR2E    LA    R7,IDBUCKET             E26 NAME FROM IDBUCKET           00956001
0006F2 90CF BD74            02D74   964 ERR2D    STM   R12,R15,ERRSAVE                                          00957001
0006F6 45C0 588E            0088E   965          BAL   R12,ERROR2              GET NAME AND LENGTHS             00958001
0006FA 45C0 584A            0084A   966          BAL   R12,ERROR1              CREATE ENTRY IN ERRPOOL          00959001
0006FE 4420 58AC            008AC   967          EX    R2,ERRMOVE              MOVE THE NAME                    00960001
000702 98CF BD74            02D74   968          LM    R12,R15,ERRSAVE                                          00961001
000706 47F0 6002            00002   969          B     2(,R6)                                                   00962001
                                    970 *                                                                       00963001
                                    971 *        ERROR3                                                         00964001
                                    972 *                                                                       00965001
                                    973 *        GENERATES PATTERN FOR E3                                       00966001
                                    974 *        ENTERED FROM LABEL, COLONLST                                   00967001
                                    975 *        TAKES INFORMATION FROM BUCKET                                  00968001
                                    976 *                                                                       00969001
00070A 90CF BD74            02D74   977 ERROR3   STM   R12,R15,ERRSAVE         GET PARAMETER FIELD              00970001
00070E 4160 5722            00722   978          LA    R6,PARAM3                                                00971001
000712 45C0 584A            0084A   979          BAL   R12,ERROR1              CREATE PATTERN                   00972001
000716 D205 F004 537E 00004 0037E   980          MVC   4(6,R15),BUCKET         MOVE IN INFORMATION              00973001
00071C 98CF BD74            02D74   981          LM    R12,R15,ERRSAVE                                          00974001
000720 07FA                         982          BR    R10                                                      00975001
                                    983 *                                                                       00976001
000722 0A03                         984 PARAM3   DC    X'0A03'                                                  00977001
                                    985 *                                                                       00978001
                                    986 *        ERR4                                                           00979001
                                    987 *                                                                       00980001
                                    988 *        PROCESS ALL TERMINATING ERRORS THAT ARE 4 BYTTES LONG          00981001
                                    989 *                                                                       00982001
                                    990 *        NO - 4, 6, 20, 22, 38, 41, 44, 213, 215, 216                   00983001
                                    991 *        ENTERED FROM - LABEL, ITABCLEA, COB, BEGIN, BEG1,              00984001
                                    992 *                       PBLCKEND, FOR, PROCEDUR, ENDMISS                00985001
                                    993 *        EXITS TO COMPFIN                                               00986001
                                    994 *                                                                       00987001
000724 45C0 584A            0084A   995 ERR4     BAL   R12,ERROR1                                               00988001
                                    996 *                                                                       00989001
                                    997 *        COMPFIN                                                        00990001
                                    998 *                                                                       00991001
                                    999 *        TERMINATING ERROR HAS BEEN FOUND                               00992001
                                   1000 *        SETS TERR IN COMPFLGS                                          00993001
                                   1001 *        EXITS TO KOPOOLRL IN TERMINATION                               00994001
                                   1002 *                                                                       00995001
000728 9608 D080      00080        1003 COMPFIN  OI    COMPFLGS,TERR           SET TERMINATING ERROR BIT        00996001
00072C 47F0 B3F6            023F6  1004          B     KOPOOLRL                EXIT TO TERMINATION              00997001
                                   1005 *                                                                       00998001
                                   1006 *        ERR5                                                           00999001
                                   1007 *                                                                       01000001
                                   1008 *        ERR5A     E35  FROM BPRTAB, DISP IN TESTTABL                   01001001
                                   1009 *        ERR5      E2   FROM BPRTAB, DISP IN ARTABLE                    01002001
                                   1010 *        GENERATES ERROR PATTERN RETURNS TO TESTLOOP OR LIST            01003001
                                   1011 *                                                                       01004001
000730 4160 574A            0074A  1012 ERR5A    LA    R6,PPARLST              GET PARAMETER FIELD              01005001
000734 47F0 573C            0073C  1013          B     ERR5B                                                    01006001
                                   1014 *                                                                       01007001
000738 4160 574C            0074C  1015 ERR5     LA    R6,PONTPAR              GET PARAMETER FIELD              01008001
00073C 90CF BD74            02D74  1016 ERR5B    STM   R12,R15,ERRSAVE                                          01009001
000740 45C0 584A            0084A  1017          BAL   R12,ERROR1              GENERATE PATTERN                 01010001
000744 98CF BD74            02D74  1018          LM    R12,R15,ERRSAVE                                          01011001
000748 07FA                        1019          BR    R10                     RETURN TO TESTLOOP OR LIST       01012001
                                   1020 *                                                                       01013001
00074A 0423                        1021 PPARLST  DC    X'0423'                                                  01014001
00074C 0402                        1022 PONTPAR  DC    X'0402'                 E2                               01015001
                                   1023 *                                                                       01016001
                                   1024 *        ERR6                                                           01017001
                                   1025 *                                                                       01018001
                                   1026 *        GENERATES PATTERN FOR E6                                       01019001
                                   1027 *        TESTS IF PROGRAM STARTED IF NOT, NO ERROR MESSAGE              01020001
                                   1028 *        TEST IF IN COMMENT OR IDENTIFIER PROGRAM                       01021001
                                   1029 *        TAKES THE 6 CHARACTERS PRECEEDING THE FIRST QUOTE              01022001
                                   1030 *        RETURNS TO APOSTROPHE PROGRAM TO TEST ON SECOND                01023001
                                   1031 *        QUOTE                                                          01024001
                                   1032 *                                                                       01025001
00074E 9120 DD8F      00D8F        1033 ERR6     TM    BITS2,X'20'             FIRST BEGIN FOUND YET ?          01026001
000752 4780 5174            00174  1034          BZ    TESTLOOP                NO                               01027001
000756 91FF DD81      00D81        1035          TM    FBYTE,X'FF'                                              01028001
00075A 4710 5304            00304  1036          BO    ENTRAPR                 INVALID IDENTIFIER               01029001
00075E 4780 576A            0076A  1037          BZ    ERR6A                   COMMENT                          01030001
000762 4110 1001            00001  1038          LA    R1,1(,R1)                                                01031001
000766 47F0 5C0C            00C0C  1039          B     TPSPECER                                                 01032001
                                   1040 *                                                                       01033001
00076A 0610                        1041 ERR6A    BCTR  R1,0                                                     01034001
00076C 90CF BD74            02D74  1042          STM   R12,R15,ERRSAVE                                          01035001
000770 45C0 584A            0084A  1043          BAL   R12,ERROR1                                               01036001
000774 5B10 BD24            02D24  1044          S     R1,KF6                  SUBTRACT 6                       01037001
000778 D205 F004 1000 00004 00000  1045          MVC   4(6,R15),0(R1)          MOVE OUT INFORMATION TO POOL     01038001
00077E 4110 1007            00007  1046          LA    R1,7(,R1)                                                01039001
000782 98CF BD74            02D74  1047          LM    12,15,ERRSAVE                                            01040001
000786 47F0 5304            00304  1048          B     ENTRAPR                 RETURN TO TEST SECOND APOST      01041001
                                   1049 *                                                                       01042001
                                   1050 *        ERR7                                                           01043001
                                   1051 *                                                                       01044001
                                   1052 *        TAKES CARE OF ALL SERIOUS AND WARNING MESSAGES THAT ARE        01045001
                                   1053 *        4 BYTES LONG                                                   01046001
                                   1054 *                                                                       01047001
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  Loc  Object Code     Addr1 Addr2  Stmt    Source Statement                                      X390 3.1.04  2012/08/17 13.12

                                    1055 *           ENTERED FROM -                                                   01048001
                                    1056 *           ERR1, IERSPEC, ARNAMSE, SWITCHNSE, PNAMESE, LABNAMER,            01049001
                                    1057 *           CODE, SEMCO, ERR18 ERR23, CODE, SPEC, VALUE, VALDLB2,            01050001
                                    1058 *           FIRSTBEG, ERR9, LABEL, PROCEDURE, SWITCH, COM                    01051001
                                    1059 *           1, 5, 8, 15, 17, 18, 23, 24, 25, 28, 29, 42, 43, 216             01052001
                                    1060 *           RETURNS TO CALLING SEQUENCE                                      01053001
                                    1061 *                                                                            01054001
00078A 90CF BD74            02D74   1062 ERR7        STM    R12,R15,ERRSAVE                                           01055001
00078E 45C0 584A            0084A   1063             BAL    R12,ERROR1             CREATE ENTRY                       01056001
000792 98CF BD74            02D74   1064             LM     R12,R15,ERRSAVE                                           01057001
000796 47F0 6002            00002   1065             B      2(,R6)                                                    01058001
                                    1066 *                                                                            01059001
                                    1067 *           ERR8                                                             01060001
                                    1068 *                                                                            01061001
                                    1069 *           GENERATES ERROR PATTERN E11 ONCE                                 01062001
                                    1070 *                                                                            01063001
                                    1071 *           IF FOUND DELIMITER IS COMMENT E18 IS GIVEN INSTEAD               01064001
                                    1072 *           ENTERED FROM - TYPESPEC, STARTDEL                                01065001
                                    1073 *           EXITS TO TESTLOOP                                                01066001
                                    1074 *                                                                            01067001
00079A 9180 DD90      00D90         1075 ERR8        TM     BITS3,E11BIT           MESSAGE ALLREADY GIVEN ONCE ?      01068001
00079E 4110 1001            00001   1076             LA     R1,1(,R1)              GET NEXT CHARACTER                 01069001
0007A2 4710 5174            00174   1077             BO     TESTLOOP               YES, RETURN                        01070001
0007A6 9538 DD80      00D80         1078             CLI    BCHAR,X'38'            COMMENT FOUND ?                    01071001
0007AA 4780 57BC            007BC   1079             BE     E18                    YES GENERATE E18 INSTEAD           01072001
0007AE 9680 DD90      00D90         1080             OI     BITS3,E11BIT           SET E11BIT                         01073001
0007B2 4560 578A            0078A   1081             BAL    R6,ERR7                GENERATE E11 PATTERN               01074001
                                    1082 *                                                                            01075001
0007B6 040B                         1083             DC     X'040B'                                                   01076001
                                    1084 *                                                                            01077001
0007B8 47F0 57C2            007C2   1085             B      E18A                                                      01078001
                                    1086 *                                                                            01079001
0007BC 4560 578A            0078A   1087 E18         BAL    R6,ERR7                                                   01080001
                                    1088 *                                                                            01081001
0007C0 0412                         1089             DC     X'0412'                                                   01082001
                                    1090 *                                                                            01083001
0007C2 07FA                         1091 E18A        BR     R10                    RETURN                             01084001
                                    1092 *                                                                            01085001
                                    1093 *           ERR9                                                             01086001
                                    1094 *                                                                            01087001
                                    1095 *           GENERATE E9 PATTERN                                              01088001
                                    1096 *                                                                            01089001
                                    1097 *           ENTERED FROM - TED, END, READROUT                                01090001
                                    1098 *           EXITS TO EODADIN                                                 01091001
                                    1099 *                                                                            01092001
0007C4 4560 578A            0078A   1100 ERR9        BAL    R6,ERR7                PROGRAM CONT AFTER LAST END        01093001
                                    1101 *                                                                            01094001
0007C8 042B                         1102             DC     X'042B'                                                   01095001
                                    1103 *                                                                            01096001
0007CA 47F0 B3B2            023B2   1104             B      EODADIN                                                   01097001
                                    1105 *                                                                            01098001
                                    1106 *           ERROR10                                                          01099001
                                    1107 *                                                                            01100001
                                    1108 *           GENERATES E10 PATTERN                                            01101001
                                    1109 *                                                                            01102001
                                    1110 *           INSERTS IN THE NOT SPECIFID PARAMETERS AN ALL PURPOSE            01103001
                                    1111 *           IDENTIFIER                                                       01104001
                                    1112 *           RETURNS TO CALLING PROGRAM                                       01105001
                                    1113 *                                                                            01106001
0007CE 4560 56D4            006D4   1114 ERROR10     BAL    R6,ERR2B                                                  01107001
                                    1115 *                                                                            01108001
0007D2 000A                         1116             DC     X'000A'                E10                                01109001
                                    1117 *                                                                            01110001
0007D4 5860 DD70            00D70   1118             L      R6,LPBP                                                   01111001
0007D8 4160 600B            0000B   1119 FINDEMTY    LA     R6,11(,R6)             GET FIRST PARAMETER                01112001
0007DC 5960 DD68            00D68   1120             C      R6,AITL                ALL PARAMETERS CHECKED ?           01113001
0007E0 078C                         1121             BER    R12                    WHEN ALL CHECKED RETURN            01114001
0007E2 9500 6006      00006         1122             CLI    6(R6),0                INSERT ALL PURPOSE IDENTIFIER      01115001
0007E6 4770 57D8            007D8   1123             BNE    FINDEMTY               IN EMPTY INTERNAL NAMES            01116001
0007EA D204 6006 57F4 00006 007F4   1124             MVC    6(5,R6),ALLPUPOS                                          01117001
0007F0 47F0 57D8            007D8   1125             B      FINDEMTY                                                  01118001
                                    1126 *                                                                            01119001
0007F4 91FF010000                   1127 ALLPUPOS    DC     X'91FF010000'                                             01120001
                                    1128 *                                                                            01121001
                                    1129 *           ERR13                                                            01122001
                                    1130 *                                                                            01123001
                                    1131 *           GENERATES E13 PATTERN                                            01124001
                                    1132 *           PICKS UP THE DELIMITER FROM KEYWTAB                              01125001
                                    1133 *                                                                            01126001
0007F9 00
0007FA 90CF BD74            02D74   1134 ERR13       STM    12,15,ERRSAVE                                             01127001
0007FE 41C0 E005            00005   1135             LA     R12,5(,R14)            INCREASE TO GET WHOLE LENGTH       01128001
000802 42C6 0000            00000   1136             STC    R12,0(R6)                                                 01129001
000806 45C0 584A            0084A   1137             BAL    R12,ERROR1                                                01130001
00080A 58E0 BD7C            02D7C   1138             L      R14,ERRSAVE+8          GET LENGTH OF DELIMITER            01131001
00080E 4170 4001            00001   1139             LA     R7,1(,R4)              GET START ADDR OF DELIMITER        01132001
000812 44E0 58AC            008AC   1140             EX     R14,ERRMOVE            MOVE DELIMITER TO ERROR PATTERN    01133001
000816 98CF BD74            02D74   1141             LM     12,15,ERRSAVE                                             01134001
00081A 47F0 6002            00002   1142             B      2(0,R6)                RETURN                             01135001
                                    1143 *                                                                            01136001
                                    1144 *           ERROR21                                                          01137001
                                    1145 *                                                                            01138001
                                    1146 *           GENERATES E21 PATTERN                                            01139001
                                    1147 *           PICKS UP DELIMITER FROM DELIMITER TABLE                          01140001
                                    1148 *           EXITS TO PROGRAM WHICH CALLED FOR BEG1                           01141001
                                    1149 *                                                                            01142001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

00081E 90CF BD74            02D74  1150 ERROR21  STM   12,15,ERRSAVE                                               01143001
000822 4160 E005            00005  1151          LA    R6,5(,R14)          INCREASE L TO GET WHOLE LENGTH          01144001
000826 4260 5848            00848  1152          STC   R6,E21PAR                                                   01145001
00082A 4160 5848            00848  1153          LA    R6,E21PAR                                                   01146001
00082E 45C0 584A            0084A  1154          BAL   R12,ERROR1                                                  01147001
000832 5870 BDC8            02DC8  1155          L     R7,SAVE1            GET DEK FROM DELIMITER TABLE            01148001
000836 58E0 BD7C            02D7C  1156          L     R14,ERRSAVE+8       LENGTH FROM SAVEAREA                    01149001
00083A 44E0 58AC            008AC  1157          EX    R14,ERRMOVE         MOVE IN DEK IN ERROR MESSAGE            01150001
00083E 4130 3001            00001  1158          LA    R3,1(,R3)           SUBSTITUTE BEG1 DECREASION              01151001
000842 98CF BD74            02D74  1159          LM    12,15,ERRSAVE       BEGIN WILL REMAIN COMPOUND              01152001
000846 07F9                        1160          BR    R9                  RETURN                                  01153001
                                   1161 *                                                                          01154001
000848 0015                        1162 E21PAR   DC    X'0015'             E21                                     01155001
                                   1163 *                                                                          01156001
                                   1164 *        ERROR1                                                            01157001
                                   1165 *                                                                          01158001
                                   1166 *        CHECKS IF SPACE LEFT IN ERRORPOOL                                 01159001
                                   1167 *        INSERTS LENGTH, SEMCNT, ERROR NUMBER                              01160001
                                   1168 *        RETURNS TO CALLIN ERROR PUTINE                                    01161001
                                   1169 *                                                                          01162001
00084A D200 5863 6000 00863 00000  1170 ERROR1   MVC   ERRMOD1+3(1),0(R6)  MOVES IN THE LENGTH AND                 01163001
000850 D200 5879 6000 00879 00000  1171          MVC   ERRMOD2+1(1),0(R6)  ERROR NUMBER IN THE FOLLOWING           01164001
000856 D200 587D 6001 0087D 00001  1172          MVC   ERRMOD3+1(1),1(R6)  INSTRUCTIONS                            01165001
00085C 58F0 D0C0            000C0  1173          L     R15,NEXTERR                                                 01166001
000860 41E0 F000            00000  1174 ERRMOD1  LA    R14,0(,R15)                                                 01167001
000864 59E0 D0C4            000C4  1175          C     R14,ENDPOOL         ROOM LEFT IN ERRORPOOL ?                01168001
000868 47D0 5870            00870  1176          BNH   *+8                 FOR THIS MESSAGE                        01169001
00086C 47F0 56AC            006AC  1177          B     ERR0                NO, GENERATE E212                       01170001
                                   1178 *                                                                          01171001
000870 58F0 D0C0            000C0  1179          L     R15,NEXTERR                                                 01172001
000874 50E0 D0C0            000C0  1180          ST    R14,NEXTERR         CORRECT NEXTERR POINTER                 01173001
000878 9200 F000      00000        1181 ERRMOD2  MVI   0(R15),0            MOVE IN LENGTH                          01174001
00087C 9200 F001      00001        1182 ERRMOD3  MVI   1(R15),0                    ERRORNUMBER                     01175001
000880 D201 F002 D09C 00002 0009C  1183          MVC   2(2,R15),SEMCNT             SEMICOLON COUNTER               01176001
000886 18E1                        1184          LR    R14,R1              MAKE R14 POINT TO SIX CHAR              01177001
000888 4BE0 58B2            008B2  1185          SH    R14,KH7             BEFORE CURRENT INPUT POINTER            01178001
00088C 07FC                        1186          BR    R12                                                         01179001
                                   1187 *                                                                          01180001
                                   1188 *        ERROR2                                                            01181001
                                   1189 *                                                                          01182001
                                   1190 *        FINDS FIRST NONZERO CHAR IN BUCKET, ITAB, IDBUCKET OR             01183001
                                   1191 *        BUCKET                                                            01184001
                                   1192 *                                                                          01185001
00088E 4120 0005            00005  1193 ERROR2   LA    R2,5                INITIALIZE R2 FOR THE LOOP              01186001
000892 4220 5899            00899  1194 ERROR2A  STC   R2,ERRKCAL+3                                                01187001
000896 9500 7000      00000        1195 ERRKCAL  CLI   0(R7),0             LOOP TO FIND THE FIRST 0 CHAR           01188001
00089A 4770 58A2            008A2  1196          BNE   ERRKC01             OR END OF EXTERNALNAME                  01189001
00089E 4620 5892            00892  1197          BCT   R2,ERROR2A                                                  01190001
0008A2 41F0 2005            00005  1198 ERRKC01  LA    R15,5(,R2)          INCREASE TO GET THE WHOLE               01191001
0008A6 42F0 6000            00000  1199          STC   R15,0(,R6)          ERROR MESSAGE LENGTH                    01192001
0008AA 07FC                        1200          BR    R12                                                         01193001
                                   1201 *                                                                          01194001
0008AC                             1202          CNOP  0,4                                                         01195001
0008AC D200 F004 7000 00004 00000  1203 ERRMOVE  MVC   4(1,R15),0(R7)                                              01196001
                                   1204 *                                                                          01197001
0008B2 0007                        1205 KH7      DC    X'0007'                                                     01198001
                                   1206 *                                                                          01199001
                                   1207 *        IDCHECK1                                                          01200001
                                   1208 *                                                                          01201001
                                   1209 *        CHECKS IDENTIFIER NAMES FOR ARRAY, PROCEDURE AND SWITCH           01202001
                                   1210 *                                                                          01203001
                                   1211 *        MOVES THE FIRST 6 CHARACTERS OF THE NAME TO ITAB AND THE          01204001
                                   1212 *        OUTPUT                                                            01205001
                                   1213 *        RETURNS VIA R6 WHEN A CHARACTER IS FOUND THAT IS NOT              01206001
                                   1214 *        LETTER, DIGIT, BLANK OR ZETA                                      01207001
                                   1215 *                                                                          01208001
0008B4 45C0 598C            0098C  1216 IDCHECK1 BAL   R12,COB             CHECK IF O/P AREA FILLED                01209001
0008B8 D200 3000 1000 00000 00000  1217          MVC   0(1,R3),0(R1)       MOVE OUT FIRST CHAR                     01210001
0008BE 4130 3001            00001  1218          LA    R3,1(,R3)                                                   01211001
0008C2 5870 DD68            00D68  1219          L     R7,AITL             GET ITAB POINTER                        01212001
0008C6 D200 7000 1000 00000 00000  1220          MVC   0(1,R7),0(R1)       MOVE IN FIRST CHAR TO ITAB              01213001
0008CC 4170 7001            00001  1221          LA    R7,1(,R7)                                                   01214001
0008D0 4120 0001            00001  1222          LA    R2,1                INITIALIZE R2                           01215001
0008D4 4190 58DC            008DC  1223          LA    R9,IDCHECK3                                                 01216001
0008D8 4110 1001            00001  1224 IDCHECK2 LA    R1,1(,R1)           GET NEXT CHAR                           01217001
0008DC 952F 1000      00000        1225 IDCHECK3 CLI   0(R1),XFZETA        WHAT IS CHAR ?                          01218001
0008E0 0746                        1226          BLR   R6                  NOT LETTER                              01219001
0008E2 4780 5A28            00A28  1227          BE    CIB                 ZETA                                    01220001
0008E6 5920 BD24            02D24  1228          C     R2,KF6              LETTER, 6 CHAR MOVED ALREADY ?          01221001
0008EA 4780 58D8            008D8  1229          BE    IDCHECK2            YES, SKIP ADDITIONAL CHAR               01222001
0008EE 45C0 598C            0098C  1230          BAL   R12,COB             CHECK IF O/P AREA FILLED                01223001
0008F2 D200 3000 1000 00000 00000  1231          MVC   0(1,R3),0(R1)       MOVE CHAR TO OUTPUT                     01224001
0008F8 4130 3001            00001  1232          LA    R3,1(,R3)                                                   01225001
0008FC D200 7000 1000 00000 00000  1233          MVC   0(1,R7),0(R1)       TO ITAB                                 01226001
000902 4170 7001            00001  1234          LA    R7,1(,R7)           INCREASE                                01227001
000906 4120 2001            00001  1235          LA    R2,1(,R2)           POINTERS                                01228001
00090A 47F0 58D8            008D8  1236          B     IDCHECK2            GO AND CHECK NEXT CHAR                  01229001
                                   1237 *                                                                          01230001
                                   1238 *        FINDSEMC                                                          01231001
                                   1239 *                                                                          01232001
                                   1240 *        CHECKS FOR SEMICOLON OR POINT                                     01233001
                                   1241 *        COMMA BLANKS AND I/P BUFFER CHANGE IS HANDLED                     01234001
                                   1242 *        IF SEMICOLON IS FOUND THE RETURN IS VIA R12 IF NOT                01235001
                                   1243 *        THE RETURN IS VIA R6                                              01236001
                                   1244 *                                                                          01237001
00090E 4110 1001            00001  1245 FINDSEMA LA    R1,1(,R1)                                                   01238001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

000912 4190 5912            00912  1246 FINDSEMC LA    R9,*                                                           01239001
000916 950B 1000      00000        1247          CLI   0(R1),XFSCOLON        SEMICOLON ?                              01240001
00091A 4780 C000            00000  1248          BE    0(,R12)               YES, SEMICOLON FOUND                     01241001
00091E 952D 1000      00000        1249          CLI   0(R1),XFPERIOD        POINT ?                                  01242001
000922 4780 5938            00938  1250          BE    FINDCOMA              YES, LOOK FOR COMMA                      01243001
000926 952B 1000      00000        1251          CLI   0(R1),XFBLANK         BLANK ?                                  01244001
00092A 4780 590E            0090E  1252          BE    FINDSEMA              YES, BACK TO START                       01245001
00092E 952F 1000      00000        1253          CLI   0(R1),XFZETA                                                   01246001
000932 4780 5A28            00A28  1254          BE    CIB                                                            01247001
000936 07F6                        1255          BR    R6                    ERROR, NO SEMICOLON                      01248001
                                   1256 *                                                                             01249001
000938 4190 5940            00940  1257 FINDCOMA LA    R9,*+8                                                         01250001
00093C 4110 1001            00001  1258 FINDCOMB LA    R1,1(,R1)                                                      01251001
000940 9525 1000      00000        1259          CLI   0(R1),XFCOMMA         COMMA ?                                  01252001
000944 4780 C000            00000  1260          BE    0(,R12)               YES, SEMICOLON FOUND                     01253001
000948 952B 1000      00000        1261          CLI   0(R1),XFBLANK         BLANK ?                                  01254001
00094C 4780 593C            0093C  1262          BE    FINDCOMB                                                       01255001
000950 952F 1000      00000        1263          CLI   0(R1),XFZETA                                                   01256001
000954 4780 5A28            00A28  1264          BE    CIB                                                            01257001
000958 07F6                        1265          BR    R6                    ERROR, NO SEMICOLON                      01258001
                                   1266 *                                                                             01259001
                                   1267 *        ITABCLEA                                                             01260001
                                   1268 *                                                                             01261001
                                   1269 *        CHECKS FOR ITAB OVERFLOW AND CLEARS THE NEXT ENTRY                   01262001
                                   1270 *                                                                             01263001
00095A 58F0 DD68            00D68  1271 ITABCLEA L     R15,AITL                                                       01264001
00095E 41F0 F00B            0000B  1272          LA    R15,11(,R15)                                                   01265001
000962 59F0 DCC8            00CC8  1273 ITABCLEC C     R15,ELI               ROOM FOR ONE MORE ITAB ENTRY ?           01266001
000966 4740 5970            00970  1274          BL    ITABCLEB                                                       01267001
00096A 4560 5724            00724  1275          BAL   R6,ERR4                                                        01268001
                                   1276 *                                                                             01269001
00096E 04D5                        1277          DC    X'04D5'               E213                                     01270001
                                   1278 *                                                                             01271001
000970 187F                        1279 ITABCLEB LR    R7,R15                INCREASE ITAB POINTERS                   01272001
000972 50F0 DD68            00D68  1280          ST    R15,AITL                                                       01273001
000976 9200 F000      00000        1281          MVI   0(R15),0              CLEAR NEXT                               01274001
00097A D209 F001 F000 00001 00000  1282          MVC   1(10,R15),0(R15)      ITAB ENTRY                               01275001
000980 07FC                        1283          BR    R12                   RETURN                                   01276001
                                   1284 *                                                                             01277001
                                   1285 *        COB                                                                  01278001
                                   1286 *                                                                             01279001
                                   1287 *        CHECKS IF NEW O/P BUFFER IS NEEDED                                   01280001
                                   1288 *                                                                             01281001
                                   1289 *        ENTRY IS TO COBSPEC IF TWO OR MORE CONTINIOUS BYTES ARE              01282001
                                   1290 *        NEEDED                                                               01283001
                                   1291 *        THE CHANGE OF ADDR BETWEEN THE TWO BUFFERS IS DONE                   01284001
                                   1292 *        WITH DISP. DISP IS EITHER 0 OR 4 SO ADDARI+DISP WILL                 01285001
                                   1293 *        PICK UP EITHER ADDARI OR THE ADDR OF THE ALTERNATE                   01286001
                                   1294 *        O/P BUFFER                                                           01287001
                                   1295 *        WADDARI POINTS TO THE FIRST BYTE OF THE CURRENT O/P                  01288001
                                   1296 *        BUFFER                                                               01289001
                                   1297 *        R3 IS THE CURRENT O/P POINTER                                        01290001
                                   1298 *        APE POINTS TO THE LAST BYTE OF THE CORRENT BUFFER                    01291001
                                   1299 *        ONC CONTAINS THE CURRENT O/P RECORD NUMBER                           01292001
                                   1300 *        ZETA IS THE BUFFER END INDICATION                                    01293001
                                   1301 *                                                                             01294001
000982 5900 DCDC            00CDC  1302 COBSPEC  C     R0,APE                SPACE LEFT FOR X MORE BYTES ?            01295001
000986 074C                        1303          BLR   R12                   YES, RETURN                              01296001
000988 47F0 5992            00992  1304          B     COBSPEB               NO CHANGE OUTPUT BUFFER FIRST            01297001
                                   1305 *                                                                             01298001
00098C 5930 DCDC            00CDC  1306 COB      C     R3,APE                SPACE LEFT FOR ONE MORE BYTE ?           01299001
000990 074C                        1307          BLR   R12                   YES, RETURN                              01300001
000992 922F 3000      00000        1308 COBSPEB  MVI   0(R3),XFZETA          MOVE ZETA TO O/P BUFFER                  01301001
000996 90E2 BDC8            02DC8  1309          STM   R14,R2,SAVE1          SAVE REGISTERS                           01302001
00099A 5060 BDE0            02DE0  1310          ST    R6,SAVE1+24                                                    01303001
00099E 95FF DD85      00D85        1311          CLI   ONC,255               ALREADY 256 OUTPUT RECORDS ?             01304001
0009A2 4740 59AC            009AC  1312          BL    COBSPED               NO, BYPASS ERROR MSG                     01305001
0009A6 4560 5724            00724  1313          BAL   R6,ERR4               YES, TERMINATE COMPILATION               01306001
                                   1314 *                                                                             01307001
0009AA 04D7                        1315          DC    X'04D7'               E215                                     01308001
                                   1316 *                                                                             01309001
0009AC 5830 DD74            00D74  1317 COBSPED  L     R3,WADDARI            LOAD ADDR OF CURRENT O/P REC             01310001
0009B0 4160 D578            00578  1318          LA    R6,SYSUT1             R6 -> SYSUT1 DCB ADDR                    01311001
0009B4 9500 DD85      00D85        1319          CLI   ONC,0                 FIRST OUTPUT RECORD ?                    01312001
0009B8 4780 59CC            009CC  1320          BE    WRITEOB               YES, SKIP CHECK                          01313001
                                   1321 *                                                                             01314001
                                   1322          CHECK ODECB                 CHECK IF BEFORE LAST RECORD IS           01315001
0009BC 4110 59D0            009D0  1323+         LA    1,ODECB                    LOAD PARAMETER REG 1                02-IHBIN
0009C0 58E0 1008            00008  1324+         L     14,8(0,1)              PICK UP DCB ADDR                        01-CHECK
0009C4 58F0 E034            00034  1325+         L     15,52(0,14)            LOAD CHECK ROUTINE ADDR                 01-CHECK
0009C8 05EF                        1326+         BALR  14,15                  LINK TO CHECK ROUTINE                   01-CHECK
                                   1327 *                                    WRITTEN                                  01316001
                                   1328 WRITEOB  WRITE ODECB,SF,(R6),(R3)                                             01317001
0009CA 0700                        1329+         CNOP  0,4                                                            02-IHBRD
0009CC 4510 59E4            009E4  1330+WRITEOB  BAL   1,*+24                 LOAD DECB ADDRESS                       02-IHBRD
0009D0 00000000                    1331+ODECB    DC    F'0'                            EVENT CONTROL BLOCK            02-IHBRD
0009D4 00                          1332+         DC    X'00'                           TYPE FIELD                     02-IHBRD
0009D5 20                          1333+         DC    X'20'                           TYPE FIELD                     02-IHBRD
0009D6 0000                        1334+         DC    AL2(0)                          LENGTH                         02-IHBRD
0009D8 00000000                    1335+         DC    A(0)                            DCB ADDRESS                    02-IHBRD
0009DC 00000000                    1336+         DC    A(0)                            AREA ADDRESS                   02-IHBRD
0009E0 00000000                    1337+         DC    A(0)                            RECORD POINTER WORD            02-IHBRD
0009E4 5061 0008            00008  1338+         ST    R6,8(1,0)                       STORE DCB ADDRESS              02-IHBRD
0009E8 5031 000C            0000C  1339+         ST    R3,12(1,0)                      STORE AREA ADDRESS             02-IHBRD
0009EC 58F1 0008            00008  1340+         L     15,8(1,0)         LOAD DCB ADDRESS                             02-IHBRD
0009F0 58F0 F030            00030  1341+         L     15,48(0,15)                     LOAD RDWR ROUTINE ADDR 02-IHBRD
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

0009F4 05EF                          1342+        BALR  14,15                          LINK TO RDWR ROUTINE   02-IHBRD
                                     1343 *                                                                   01318001
0009F6 9704 DCD4        00CD4        1344         XI    DISP,X'04'              CHANGE ADDR DISPLACEMENT      01319001
0009FA 4320 DCD4              00CD4  1345         IC    R2,DISP                                               01320001
0009FE 5832 DCCC              00CCC  1346         L     R3,ADDARI(R2)           COMPUTE VALID O/P BUFFER ADDR 01321001
000A02 5030 DD74              00D74  1347         ST    R3,WADDARI              STORE IN WADDARI              01322001
000A06 18E3                          1348         LR    R14,R3                  COMPUTE ADDR OF LAST BYTE IN  01323001
000A08 5AE0 D0E0              000E0  1349         A     R14,SRCE1S              THE NEW OUTPUT AREA           01324001
000A0C 06E0                          1350         BCTR  R14,0                                                 01325001
000A0E 50E0 DCDC              00CDC  1351         ST    R14,APE                 SAVE IN APE                   01326001
000A12 4320 DD85              00D85  1352         IC    R2,ONC                  INCREASE OUTPUT RECORD COUNTER 01327001
000A16 4120 2001              00001  1353         LA    R2,1(,R2)                                             01328001
000A1A 4220 DD85              00D85  1354         STC   R2,ONC                                                01329001
000A1E 5860 BDE0              02DE0  1355         L     R6,SAVE1+24                                           01330001
000A22 98E2 BDC8              02DC8  1356         LM    R14,R2,SAVE1                                          01331001
000A26 07FC                          1357         BR    R12                      RETURN TO CALLING SEQUENCE   01332001
                                     1358 *                                                                   01333001
                                     1359 *       CIB                                                         01334001
                                     1360 *                                                                   01335001
                                     1361 *       GET NEXT RECORD AND PRINTS IT WITH THE SEMICOLON COUNTER    01336001
                                     1362 *                                                                   01337001
                                     1363 *       IF ISO CODE IS SPECIFIED A TRANSLATION IS FIRST MADE TO     01338001
                                     1364 *       EBCDIC                                                      01339001
                                     1365 *       THE RECORD IS TRANSLATED AND THE RECORD END INDICATION      01340001
                                     1366 *       ZETA IS INSERTED                                            01341001
                                     1367 *                                                                   01342001
000A28 90E2 BDC8              02DC8  1368 CIB     STM   R14,R2,SAVE1            SAVE REGS                     01343001
000A2C 4B10 58B2              008B2  1369         SH    R1,KH7                  MOVE SEVEN CHAR INFRONT       01344001
000A30 D206 DCEC 1000 00CEC 00000    1370         MVC   WABEFOR(7),0(R1)        OF WORKAREA                   01345001
000A36 9180 D081        00081        1371         TM    COMPFLGS+1,NSRCE        NOSOURCE SPECIFIED ?          01346001
000A3A 4710 5A48              00A48  1372         BO    GETREC                  YES, SKIP PRINTING            01347001
000A3E 58F0 D0B8              000B8  1373         L     R15,PRTRTADD            PRINT                         01348001
000A42 05EF                          1374         BALR  R14,R15                                               01349001
000A44 5010 DD44              00D44  1375         ST    R1,APRNTAR              SAVE NEW PRINT BUFFER ADDR    01350001
000A48 5810 D058              00058  1376 GETREC  L     R1,ASYSDCB              R1 -> SYSIN DCB ADDR          01351001
                                     1377 *                                                                   01352001
                                     1378         GET   (1),WA                  GET NEXT RECORD               01353001
000A4C 4100 DCF3              00CF3  1379+        LA    0,WA                              LOAD PARAMETER REG 0  02-IHBIN
000A50 58F0 1030              00030  1380+        L     15,48(0,1)                 LOAD GET ROUTINE ADDR      01-GET
000A54 05EF                          1381+        BALR  14,15                      LINK TO GET ROUTINE        01-GET
                                     1382 *                                                                   01354001
000A56 9110 D081        00081        1383 TESTISO TM    COMPFLGS+1,ISO          ISO INPUT ?                   01355001
000A5A 4710 5AA2              00AA2  1384         BO    ISOTRANS                YES, TRANSLATE ISO TO EBCDIC  01356001
000A5E 5810 DD44              00D44  1385         L     R1,APRNTAR                                            01357001
000A62 9180 D081        00081        1386         TM    COMPFLGS+1,NSRCE        NOSOURCE SPECIFIED ?          01358001
000A66 4710 5A88              00A88  1387         BO    NOPRINT                 YES, MOVE TO DUMMY PRINTAREA  01359001
000A6A 48F0 D09C              0009C  1388         LH    R15,SEMCNT              CONVERT SEMICOLON COUNTER     01360001
000A6E 4EF0 BD60              02D60  1389         CVD   R15,DOUBLE                                            01361001
000A72 D205 1000 BDBF 00000 02DBF    1390         MVC   0(L'SCPATTN,R1),SCPATTN  MOVE IN SEMICOLON COUNT PATTERN 01362001
000A78 DE05 1000 BD65 00000 02D65    1391         ED    0(L'SCPATTN,R1),DOUBLE+5  FORMAT SEMICOLON COUNT      01363001
000A7E D24F 100A DCF3 0000A 00CF3    1392         MVC   10(80,R1),WA            MOVE RECORD TO PRINT BUFFER   01364001
000A84 47F0 5A8E              00A8E  1393         B     PRNTREC                                               01365001
                                     1394 *                                                                   01366001
000A88 D247 BDEC DCF3 02DEC 00CF3    1395 NOPRINT MVC   SAVEPRNT+8(72),WA       IF NSRCE MOVE WA TO DUMMY PRINT 01367001
000A8E 98E2 BDC8              02DC8  1396 PRNTREC LM    R14,R2,SAVE1                                          01368001
000A92 4110 DCF3              00CF3  1397         LA    R1,WA                   SET INPUT POINTER             01369001
000A96 DC47 DCF3 BC0C 00CF3 02C0C    1398         TR    WA(72),TREXTINT         TRANSLATE RECORD              01370001
000A9C 922F 1048        00048        1399         MVI   72(R1),XFZETA           MOVE RECORD END IDENTIFIER    01371001
000AA0 07F9                          1400         BR    R9                      RETURN                        01372001
                                     1401 *                                                                   01373001
000AA2 5060 BDE0              02DE0  1402 ISOTRANS ST   R6,SAVE1+24                                           01374001
000AA6 4160 DCF3              00CF3  1403         LA    R6,WA                   GET START OF WA               01375001
000AAA 41F0 604F              0004F  1404         LA    R15,79(,R6)             GET END OF WA                 01376001
000AAE 954C 6000        00000        1405 LOOP    CLI   0(R6),X'4C'             )                             01377001
000AB2 4780 5ADE              00ADE  1406         BE    IRPAR                                                 01378001
000AB6 957B 6000        00000        1407         CLI   0(R6),X'7B'             =                             01379001
000ABA 4780 5AE6              00AE6  1408         BE    IEQUAL                                                01380001
000ABE 957C 6000        00000        1409         CLI   0(R6),X'7C'             '                             01381001
000AC2 4780 5AEE              00AEE  1410         BE    IAPOST                                                01382001
000AC6 956C 6000        00000        1411         CLI   0(R6),X'6C'             (                             01383001
000ACA 4780 5AF6              00AF6  1412         BE    ILPAR                                                 01384001
000ACE 9550 6000        00000        1413         CLI   0(R6),X'50'             +                             01385001
000AD2 4770 5AFA              00AFA  1414         BNE   LOOPEND                                               01386001
000AD6 924E 6000        00000        1415         MVI   0(R6),X'4E'             +                             01387001
000ADA 47F0 5AFA              00AFA  1416         B     LOOPEND                                               01388001
                                     1417 *                                                                   01389001
000ADE 925D 6000        00000        1418 IRPAR   MVI   0(R6),X'5D'             )                             01390001
000AE2 47F0 5AFA              00AFA  1419         B     LOOPEND                                               01391001
                                     1420 *                                                                   01392001
000AE6 927E 6000        00000        1421 IEQUAL  MVI   0(R6),X'7E'             =                             01393001
000AEA 47F0 5AFA              00AFA  1422         B     LOOPEND                                               01394001
                                     1423 *                                                                   01395001
000AEE 927D 6000        00000        1424 IAPOST  MVI   0(R6),X'7D'             '                             01396001
000AF2 47F0 5AFA              00AFA  1425         B     LOOPEND                                               01397001
                                     1426 *                                                                   01398001
000AF6 924D 6000        00000        1427 ILPAR   MVI   0(R6),X'4D'             (                             01399001
000AFA 4160 6001              00001  1428 LOOPEND LA    R6,1(,R6)                                             01400001
000AFE 196F                          1429         CR    R6,R15                  ALL CHAR CHECKED IN WA ?      01401001
000B00 47D0 5AAE              00AAE  1430         BNH   LOOP                    NO, CHECK NEXT                01402001
000B04 5860 BDE0              02DE0  1431         L     R6,SAVE1+24             YES, RETURN                   01403001
000B08 47F0 5A5E              00A5E  1432         B     TESTISO+8                                             01404001
                                     1433 *                                                                   01405001
                                     1434 *       DELTMIT                                                     01406001
                                     1435 *                                                                   01407001
                                     1436 *       TWO QUOTES HAVE BEEN FOUND                                  01408001
                                     1437 *                                                                   01409001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

                                   1438 *        IT IS CHECKED THAT THE LENGTH IS NOT ZERO OR EXCEED THE          01410001
                                   1439 *        MAXIMUM LIMIT FOR A DELIMITER (10 CHARACTERS)                     01411001
                                   1440 *        R4 POINTS TO THE FIRST AND R1 TO THE LAST QUOTE                   01412001
                                   1441 *        THE LENGTH IS USED TO GET A DISPLACEMENT FROM THE KWLUTAB         01413001
                                   1442 *        FOR A SECTION IN THE KEYWTAB. A SECTION IN THE KEYWTAB            01414001
                                   1443 *        CONTAINS ALL DELIMITERS OF THE SAME LENGTH.                       01415001
                                   1444 *        1. THE FIRST BYTE IN EACH SECTION SAYS HOW MANY ENTRIES           01416001
                                   1445 *           THERE ARE IN THE SECTION. THEREAFTER A DELIMITER PLUS 3        01417001
                                   1446 *           BYTES OF INTERNAL CODE MAKES A SUBSECTION.                     01418001
                                   1447 *        2. THE FIRST 2 BYTES OF THE INTERNAL CODE IS                      01419001
                                   1448 *           CHARECTERISTCS FOR THE DELIMITER.                              01420001
                                   1449 *        3. THE THIRD BYTE IS A DISPLACEMENT TO THE DELPRGTB,              01421001
                                   1450 *           WHERE THE ADDR IS PICKED UP TO THE PROGRAM TO HANDLE           01422001
                                   1451 *           THE DELIMITER.                                                 01423001
                                   1452 *        A CHECK IS MADE WHEN A DELIMITER IS FOUND IF IT IS THE            01424001
                                   1453 *        FIRST FOUND IN THE PROGRAM. THE EXIT IS THEN TO                   01425001
                                   1454 *        STARTDEL. THE TEST IS ON BITS2 X'20'. IF NO DELIMITER IS          01426001
                                   1455 *        FOUND THE EXIT IS TO THE EROUT PROGRAM.                           01427001
                                   1456 *        FBYTE - SWITCH -                                                  01428001
                                   1457 *        1. THE FBYTE IS FF IF AN APOSTROPHE IS FOUND IN THE               01429001
                                   1458 *           COMMENT PROGRAM                                                01430001
                                   1459 *        2. THE FBYTE IS F0 IF AN APOSTROPHE IS FOUND IN THE TYPE          01431001
                                   1460 *           PROGRAM INSTEAD OF THE FIRST CHARACTER OF THE NAME             01432001
                                   1461 *        3. OTHERWISE IT IS 00                                             01433001
                                   1462 *                                                                          01434001
000B0C 1BFF                        1463 DELIMIT  SR    R15,R15                                                    01435001
000B0E 18E1                        1464          LR    R14,R1                                                     01436001
000B10 06E0                        1465          BCTR  R14,0                                                      01437001
000B12 1BE4                        1466          SR    R14,R4                 COMPUTE LENGTH OF KEYWORD           01438001
000B14 4720 5B1E            00B1E  1467          BP    DELIM01                > ZERO ?                            01439001
000B18 4560 574E            0074E  1468          BAL   R6,ERR6                ZERO, ERROR                         01440001
                                   1469 *                                                                          01441001
000B1C 0A0C                        1470          DC    X'0A0C'                E12 DELETE FIRST APOSTROPHE         01442001
                                   1471 *                                                                          01443001
000B1E 59E0 BD38            02D38  1472 DELIM01  C     R14,KF11               LIMIT EXEEDED ALREADY ?             01444001
000B22 4720 5B7C            00B7C  1473          BH    EROUT                  BRANCH TO ERROR ROUTINE             01445001
000B26 06E0                        1474          BCTR  R14,0                                                      01446001
000B28 4190 B990            02990  1475          LA    R9,KWLUTAB                                                 01447001
000B2C 91FF DD81      00D81        1476          TM    FBYTE,X'FF'            TEST FBYTE                          01448001
000B30 4710 5C24            00C24  1477          BO    COMSPEC                                                    01449001
000B34 4740 5BF0            00BF0  1478          BM    TYPESPEC                                                   01450001
000B38 8BE0 0002            00002  1479          SLA   R14,2                  START OF LOOKUP STRING              01451001
000B3C 589E 9000            00000  1480          L     R9,0(R14,R9)                                               01452001
000B40 43F0 9000            00000  1481          IC    R15,0(,R9)             NUMBER OF ENTRIES IN THIS SECT      01453001
000B44 4190 9001            00001  1482          LA    R9,1(,R9)              AND ADDR OF FIRST WORD ENTRY        01454001
000B48 8AE0 0002            00002  1483          SRA   R14,2(0)                                                   01455001
000B4C 44E0 5B76            00B76  1484 CLCLOOP  EX    R14,EXCLC              DELIMITER FOUND ?                   01456001
000B50 4770 5B6A            00B6A  1485          BNE   NOMATCH                NO, TRY NEXT IN SAME SECTION        01457001
000B54 432E 9003            00003  1486          IC    R2,3(R14,R9)           YES, MATCH                          01458001
000B58 9120 DD8F      00D8F        1487          TM    BITS2,X'20'            PROGRAM STARTED YET ?               01459001
000B5C 4710 5B64            00B64  1488          BO    DELIM02                YES                                 01460001
000B60 47F0 5C54            00C54  1489          B     STARTDEL               NO, CHECK FOR CORRECT START         01461001
                                   1490 *                                                                          01462001
000B64 5862 BAE8            02AE8  1491 DELIM02  L     R6,DELPRGTB(R2)        BRANCH TO APPROPRIATE SUBPGM        01463001
000B68 07F6                        1492          BR    R6                     DEPENDING ON DISP IN KEYWTAB        01464001
                                   1493 *                                                                          01465001
000B6A 419E 9004            00004  1494 NOMATCH  LA    R9,4(R14,R9)           GET NEXT DELIMITER                  01466001
000B6E 46F0 5B4C            00B4C  1495          BCT   R15,CLCLOOP            ANY DELIMITERS LEFT TO CHECK ?      01467001
000B72 47F0 5B7C            00B7C  1496          B     EROUT                  BRANCH TO ERROR ROUTINE             01468001
                                   1497 *                                                                          01469001
000B76 D500 4001 9000 00001 00000  1498 EXCLC    CLC   1(1,R4),0(R9)          EXECUTED INSTRUCTION                01470001
                                   1499 *                                                                          01471001
                                   1500 *        EROUT                                                             01472001
                                   1501 *                                                                          01473001
                                   1502 *        CHECKS ALL SECTIONS OF THE KEYWTAB FOR AN EQUAL DELIMITER         01474001
                                   1503 *        TO THE ONE IN I/P, DISREGARDING LENGTH                            01475001
                                   1504 *                                                                          01476001
                                   1505 *        IF NO EQUAL FOUND E14 IS GENERATED AND THE FIRST                  01477001
                                   1506 *        APOSTROPHE IS DELETED. EXIT IS THEN TO TEST.                      01478001
                                   1507 *        IF AN EQUAL IS FOUND E13 IS GENERATED AND AN BRANCH IS            01479001
                                   1508 *        TAKEN TO THE APPROPRIATE SUBPROGRAM                               01480001
                                   1509 *                                                                          01481001
000B7C 91FF DD81      00D81        1510 EROUT    TM    FBYTE,X'FF'                                                01482001
000B80 4740 5BF0            00BF0  1511          BM    TYPESPEC               INVALID IDENTIFIER                  01483001
000B84 4710 8370            01370  1512          BO    COMCEE2                COMMENT                             01484001
000B88 4120 000A            0000A  1513 EROUTOK  LA    R2,10                  GO THROUGH ALL POSSIBILITIES        01485001
000B8C 1BFF                        1514          SR    R15,R15                ZERO R14, R15                       01486001
000B8E 1BEE                        1515          SR    R14,R14                                                    01487001
000B90 8BE0 0002            00002  1516 EROUT2   SLA   R14,2                                                      01488001
000B94 4190 B990            02990  1517          LA    R9,KWLUTAB                                                 01489001
000B98 589E 9000            00000  1518          L     R9,0(R14,R9)           GET SECTION IN KEYWTAB              01490001
000B9C 43F0 9000            00000  1519          IC    R15,0(,R9)             NUMBER OF ENTRIES IN STRING         01491001
000BA0 4190 9001            00001  1520          LA    R9,1(,R9)              FIRST ENTRY                         01492001
000BA4 8AE0 0002            00002  1521          SRA   R14,2                                                      01493001
000BA8 44E0 5B76            00B76  1522 CLCERR   EX    R14,EXCLC              DELIMITER FOUND ?                   01494001
000BAC 4770 5BCC            00BCC  1523          BNE   EROUT3                 NO                                  01495001
000BB0 9120 DD8F      00D8F        1524          TM    BITS2,STARTBIT         YES, PROGRAM STARTED YET ?          01496001
000BB4 4780 5C54            00C54  1525          BZ    STARTDEL               NO, CHECK FOR A CORRECT START       01497001
000BB8 4560 57FA            007FA  1526          BAL   R6,ERR13                                                   01498001
                                   1527 *                                                                          01499001
000BBC 000D                        1528          DC    X'000D'                E13                                 01500001
                                   1529 *                                                                          01501001
000BBE 411E 4001            00001  1530          LA    R1,1(R14,R4)           SET R1 TO ONE BEYOND DELIMITER      01502001
000BC2 432E 9003            00003  1531          IC    R2,3(R14,R9)           GET DISPLACEMENT OF PROGRAM         01503001
000BC6 5862 BAE8            02AE8  1532          L     R6,DELPRGTB(R2)        IN DELPRGTB                         01504001
000BCA 07F6                        1533          BR    R6                     BRANCH TO PROGRAM                   01505001
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  Active USINGs: WORKAREA,R13  IEX11000,R5,R8,R11

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

                                   1534 *                                                                     01506001
000BCC 419E 9004            00004  1535 EROUT3   LA    R9,4(R14,R9)         NOW GET NEXT DELIMITER            01507001
000BD0 46F0 5BA8            00BA8  1536          BCT   R15,CLCERR           ALL DEL IN STRING CHECKED ?       01508001
000BD4 41E0 E001            00001  1537          LA    R14,1(,R14)          YES, GET NEXT STRING              01509001
000BD8 4620 5B90            00B90  1538          BCT   R2,EROUT2                                              01510001
000BDC 9120 DD8F      00D8F        1539          TM    BITS2,X'20'          PROGRAM STARTED YET ?             01511001
000BE0 4780 5174            00174  1540          BZ    TESTLOOP             NO, RETURN TO MAINLOOP SCANNING   01512001
000BE4 4560 56E0            006E0  1541          BAL   R6,ERR2C                                               01513001
                                   1542 *                                                                     01514001
000BE8 0A0E                        1543          DC    X'0A0E'              E14                               01515001
                                   1544 *                                                                     01516001
000BEA 4110 4001            00001  1545          LA    R1,1(,R4)            GET NEXT CHAR                     01517001
000BEE 07FA                        1546          BR    R10                  RETURN                            01518001
                                   1547 *                                                                     01519001
                                   1548 *        TYPESPEC                                                     01520001
                                   1549 *                                                                     01521001
                                   1550 *        'REAL'' OR 'INTEGER'' OR 'BOOLEAN'' HAS BEEN FOUND           01522001
                                   1551 *                                                                     01523001
                                   1552 *        THE ONLY VALID DELIMITERS ARE AT THIS POINT ARRAY OR         01524001
                                   1553 *        PROCEDURE                                                    01525001
                                   1554 *                                                                     01526001
000BF0 D508 4001 BACE 00001 02ACE  1555 TYPESPEC CLC   1(L'KWPROC,R4),KWPROC  PROCEDURE ?                     01527001
000BF6 4780 8EE4            01EE4  1556          BE    TYPPROC              YES                               01528001
000BFA 9120 DD8F      00D8F        1557          TM    BITS2,X'20'          PROGRAM STARTED YET ?             01529001
000BFE 4780 579A            0079A  1558          BZ    ERR8                 NO, GENERATE E11                  01530001
000C02 D504 4001 BA3B 00001 02A3B  1559          CLC   1(L'KWARRAY,R4),KWARRAY  ARRAY ?                       01531001
000C08 4780 882E            0182E  1560          BE    TYPEARRY             YES                               01532001
                                   1561 *                               INVALID IDENTIFIER HAS BEEN       01533001
                                   1562 *                               FOUND GOTO IER SPEC               01534001
000C0C 9140 DD8E      00D8E        1563 TPSPECER TM    BITS1,X'40'          SPECIFICATION ?                   01535001
000C10 4710 5C1C            00C1C  1564          BO    TPSPEC01                                               01536001
000C14 41F0 84D2            014D2  1565          LA    R15,TYPEDAFI         NO, SET RETURN TO TYPE PGM        01537001
000C18 47F0 8588            01588  1566          B     IERSPEC                                                01538001
                                   1567 *                                                                     01539001
000C1C 41F0 86AE            016AE  1568 TPSPEC01 LA    R15,IDCHECK          YES, SET RETURN TO IDCHECK        01540001
000C20 47F0 8588            01588  1569          B     IERSPEC                                                01541001
                                   1570 *                                                                     01542001
                                   1571 *        COMSPEC                                                      01543001
                                   1572 *                                                                     01544001
                                   1573 *        TWO APOSTROPHES HAVE BEEN FOUND IN A COMMENT                 01545001
                                   1574 *                                                                     01546001
                                   1575 *        VALID DELIMITERS TO END A COMMENT ARE END OR ELSE            01547001
                                   1576 *                                                                     01548001
000C24 4190 BA00            02A00  1577 COMSPEC  LA    R9,KWELSE                                              01549001
000C28 D503 4001 BA00 00001 02A00  1578          CLC   1(L'KWELSE,R4),KWELSE  COMMENT ENDING WITH ELSE ?      01550001
000C2E 4770 5C3E            00C3E  1579          BNE   COMSPECN             NO                                01551001
000C32 59E0 BD18            02D18  1580          C     R14,KF3              YES, CHECK CORRECT LENGTH         01552001
000C36 4780 5D02            00D02  1581          BE    TED                  ELSE                              01553001
000C3A 47F0 5304            00304  1582          B     ENTRAPR              R10 TO FIND ANOTHER QUOTE         01554001
                                   1583 *                                                                     01555001
000C3E D502 4001 B9D2 00001 029D2  1584 COMSPECN CLC   1(L'KWEND,R4),KWEND  COMMENT ENDED WITH END ?          01556001
000C44 4770 5304            00304  1585          BNE   ENTRAPR              NO, R10 TO FIND ANOTHER QUOTE     01557001
000C48 59E0 BD14            02D14  1586          C     R14,KF2              YES, CHECK CORRECT LENGTH         01558001
000C4C 4780 5E82            00E82  1587          BE    END                  END                               01559001
000C50 47F0 5304            00304  1588          B     ENTRAPR              R10 TO FIND ANOTHER QUOTE         01560001
                                   1589 *                                                                     01561001
                                   1590 *        STARTDEL                                                     01562001
                                   1591 *                                                                     01563001
                                   1592 *        THE ONLY VALID DELIMITERS TO START A PROGRAM IS BEGIN        01564001
                                   1593 *        OR IF PRECOMPILED PROCEDURE IS SPECIFIED PROCEDURE OR        01565001
                                   1594 *        TYPE PROCEDURE                                               01566001
                                   1595 *                                                                     01567001
000C54 4220 DD80            00D80  1596 STARTDEL STC   R2,BCHAR             GET DELIMITERS CHARACTERISTIC     01568001
                                   1597 *                               FROM KEYWTAB                      01569001
000C58 9524 DD80      00D80        1598          CLI   BCHAR,X'24'          BEGIN FOUND ?                     01570001
000C5C 4780 5DA6            00DA6  1599          BE    FIRSTBEG             YES                               01571001
000C60 9104 D080      00080        1600          TM    COMPFLGS,PROC        PRECOMPILED SPECIFIED ?           01572001
000C64 4780 579A            0079A  1601          BZ    ERR8                 NO, GENERATE E11                  01573001
000C68 953C DD80      00D80        1602          CLI   BCHAR,X'3C'          FOUND WORD IS PROCEDURE ?         01574001
000C6C 4770 5C74            00C74  1603          BNE   TYPEPR01             NO                                01575001
000C70 47F0 8F28            01F28  1604          B     PROCEDUR             YES                               01576001
                                   1605 *                                                                     01577001
000C74 9518 DD80      00D80        1606 TYPEPR01 CLI   BCHAR,X'18'          TYPE FOUND ?                      01578001
000C78 4770 579A            0079A  1607          BNE   ERR8                 NO                                01579001
000C7C 4110 1001            00001  1608 TYPEPREC LA    R1,1(,R1)            LOOK FOR QUOTE TYPE PROC          01580001
000C80 952E 1000      00000        1609 TYPEPREA CLI   0(R1),XFQUOTE        QUOTE FOUND ?                     01581001
000C84 4770 5C8E            00C8E  1610          BNE   TYPEPR02             NO, BRANCH                        01582001
000C88 0610                        1611          BCTR  R1,0                 YES, DECREASE TO LET TYPE PGM     01583001
000C8A 47F0 8496            01496  1612          B     TYPE                 FIND THE QUOTE AGAIN              01584001
                                   1613 *                                                                     01585001
000C8E 952B 1000      00000        1614 TYPEPR02 CLI   0(R1),XFBLANK        BLANK ?                           01586001
000C92 4780 5C7C            00C7C  1615          BE    TYPEPREC                                               01587001
000C96 952F 1000      00000        1616          CLI   0(R1),XFZETA         ZETA ?                            01588001
000C9A 4770 579A            0079A  1617          BNE   ERR8                 NEITHER, GENERATE E11             01589001
000C9E 5090 BDDC            02DDC  1618          ST    R9,SAVE1+20          CHANGE I/P AND LOOK AGAIN         01590001
000CA2 4590 5A28            00A28  1619          BAL   R9,CIB                                                 01591001
000CA6 5890 BDDC            02DDC  1620          L     R9,SAVE1+20                                            01592001
000CAA 47F0 5C80            00C80  1621          B     TYPEPREA                                               01593001
                                   1622 *                                                                     01594001
                                   1623 *        NORMAL                                                       01595001
                                   1624 *                                                                     01596001
                                   1625 *        INSERTS IN THE O/P THE INTERNAL CODE FROM KEYWTAB            01597001
                                   1626 *                                                                     01598001
000CAE 45C0 598C            0098C  1627 NORMAL   BAL   R12,COB              CHECK IF O/P AREA FILLED          01599001
000CB2 419E 9001            00001  1628          LA    R9,1(R14,R9)         COMPUTE ADDR OF CODE              01600001
000CB6 D200 3000 9000 00000 00000  1629          MVC   0(1,R3),0(R9)        MOVE CODE TO OUTPUT BUFFER        01601001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

000CBC 4130 3001            00001  1630          LA    R3,1(,R3)               INCREASE OUTPUT AND          01602001
000CC0 4110 1001            00001  1631          LA    R1,1(,R1)               INPUT POINTERS               01603001
000CC4 07FA                        1632          BR    R10                                                  01604001
                                   1633 *                                                                   01605001
                                   1634 *        BOLCON                                                     01606001
                                   1635 *                                                                   01607001
                                   1636 *        MOVES OUT SIX BYTES OF INTERNAL CODE FOR FALSE OR TRUE     01608001
                                   1637 *                                                                   01609001
000CC6 4100 3006            00006  1638 BOLCON   LA    R0,6(,R3)                                            01610001
000CCA 45C0 5982            00982  1639          BAL   R12,COBSPEC             CHECK IF ENOUGH SPACE IN O/P 01611001
000CCE D204 3000 BD6C 00000 02D6C  1640          MVC   0(5,R3),INT             TRANSFER FIRST PART          01612001
                                   1641 *                                      OF INTERNAL NAME             01613001
000CD4 417E 9001            00001  1642          LA    R7,1(R14,R9)            AND                          01614001
000CD8 D200 3005 7000 00005 00000  1643          MVC   5(1,R3),0(R7)           LAST PART                    01615001
000CDE 4130 3006            00006  1644          LA    R3,6(,R3)               INCR OUTPUT POINTER          01616001
000CE2 4110 1001            00001  1645          LA    R1,1(,R1)               INCR INPUT POINTERS          01617001
000CE6 07FA                        1646          BR    R10                                                  01618001
                                   1647 *                                                                   01619001
                                   1648 *        GIF                                                        01620001
                                   1649 *                                                                   01621001
                                   1650 *        TRANSFERS INTERNAL CODE BYTE AND EXITS TO THE STATEMENT    01622001
                                   1651 *        PROGRAM TO CHECK IF A PROCEDURE BOBY HAS STARTED           01623001
                                   1652 *                                                                   01624001
000CE8 45C0 598C            0098C  1653 GIF      BAL   R12,COB                 CHECK IF O/P AREA FILLED     01625001
000CEC 417E 9001            00001  1654          LA    R7,1(R14,R9)            TRANSFER INTERNAL CODE       01626001
000CF0 D200 3000 7000 00000 00000  1655          MVC   0(1,R3),0(R7)                                        01627001
000CF6 4130 3001            00001  1656          LA    R3,1(,R3)               INCR OUTPUT POINTER          01628001
000CFA 4110 1001            00001  1657          LA    R1,1(,R1)               INCR INPUT POINTER           01629001
000CFE 47F0 52DE            002DE  1658          B     STATE                   BRANCH TO STATEMENT PROGRAM  01630001
                                   1659 *                                                                   01631001
                                   1660 *        TED                                                        01632001
                                   1661 *                                                                   01633001
                                   1662 *        TRANSFERS INTERNAL CODE                                    01634001
                                   1663 *        SETS POSSIBLE LABEL POINTERS                               01635001
                                   1664 *                                                                   01636001
000D02 9180 DD8F      00D8F        1665 TED      TM    BITS2,ENDBIT            ELSE ENDED FINAL END COMMENT ? 01637001
000D06 4710 57C4            007C4  1666          BO    ERR9                    YES                          01638001
000D0A 45C0 598C            0098C  1667          BAL   R12,COB                                              01639001
000D0E 419E 9001            00001  1668          LA    R9,1(R14,R9)                                         01640001
000D12 D200 3000 9000 00000 00000  1669          MVC   0(1,R3),0(R9)           TRANSFER INTERNAL CODE       01641001
000D18 5030 DD88            00D88  1670          ST    R3,OPIN                 SET LABEL POINTERS           01642001
000D1C D200 DD8C DD85 00D8C 00D85  1671          MVC   OPIN+4(1),ONC                                        01643001
000D22 D200 BDB2 9000 02DB2 00000  1672          MVC   OPINCHAR(1),0(R9)                                    01644001
000D28 4130 3001            00001  1673          LA    R3,1(,R3)                                            01645001
000D2C 5030 DD58            00D58  1674          ST    R3,LAPIN                                             01646001
000D30 4110 1001            00001  1675          LA    R1,1(,R1)                                            01647001
000D34 94FE DD8F      00D8F        1676          NI    BITS2,X'FE'             SET ENDELSE BIT TO ZERO      01648001
000D38 07FA                        1677          BR    R10                                                  01649001
                                   1678 *                                                                   01650001
                                   1679 *        BEGIN                                                      01651001
                                   1680 *                                                                   01652001
                                   1681 *        TEST IF PROC IN STACK                                      01653001
                                   1682 *                                                                   01654001
                                   1683 *        TRANSFERS 'BEGIN' TO OUTPUT AND STACK                      01655001
                                   1684 *        SETS OPIN, OPIN+4, LAPIN, BEGBIT                           01656001
                                   1685 *        BEGBIT IS USED TO DISTINGUISH BETWEEN COMPOUND BEGIN       01657001
                                   1686 *        AND BLOCK BEGIN. IF A DECLARATION IS FOUND WHEN THE        01658001
                                   1687 *        BEGBIT IS ON IT'S A BLOCK BEGIN THE BEGBIT IS TURNED OF    01659001
                                   1688 *        BY THE STATEMENT PROGRAM AND THE BEG1 PROGRAM              01660001
                                   1689 *                                                                   01661001
000D3A 58F0 DCD8            00CD8  1690 BEGIN    L     R15,SP                                               01662001
000D3E 950C F000      00000        1691          CLI   0(R15),X'0C'            PROC IN STACK ?              01663001
000D42 4780 5D8E            00D8E  1692          BE    BEGPROC                 YES, BRANCH TO PROC PROCESSING 01664001
000D46 4100 3004            00004  1693          LA    R0,4(,R3)                                            01665001
000D4A 45C0 5982            00982  1694          BAL   R12,COBSPEC             CHECK IF ENOUGH SPACE IN O/P 01666001
000D4E 920C 3000      00000        1695          MVI   0(R3),X'0C'             TRANSFER BEGIN TO O/P        01667001
000D52 920C BDB2      02DB2        1696          MVI   OPINCHAR,X'0C'          SET LABELSAVE                01668001
000D56 5030 DD88            00D88  1697          ST    R3,OPIN                 NOTE ITS POSITION IN OPIN AND 01669001
000D5A D200 DD8C DD85 00D8C 00D85  1698          MVC   OPIN+4(1),ONC           THE NUMBER OF THE OUTPUT BUFFER 01670001
000D60 4130 3001            00001  1699          LA    R3,1(,R3)               INCREASE OUTPUT POINTER      01671001
000D64 5030 DD58            00D58  1700          ST    R3,LAPIN                NOTE WHERE LABEL MAY START   01672001
000D68 9680 DD8E      00D8E        1701          OI    BITS1,X'80'             BEGBIT.= 1                   01673001
000D6C 41F0 F001            00001  1702          LA    R15,1(,R15)             INCR STACK POINTER           01674001
000D70 59F0 DD48            00D48  1703          C     R15,ATOPSTAK                                         01675001
000D74 4740 5D7E            00D7E  1704          BL    BEGINAA                                              01676001
000D78 4560 5724            00724  1705          BAL   R6,ERR4                 STACK OVERFLOW               01677001
                                   1706 *                                                                   01678001
000D7C 0414                        1707          DC    X'0414'                 E20                          01679001
                                   1708 *                                                                   01680001
000D7E 9208 F000      00000        1709 BEGINAA  MVI   0(R15),X'08'            PUT BEGIN IN STACK           01681001
000D82 50F0 DCD8            00CD8  1710          ST    R15,SP                                               01682001
000D86 4110 1001            00001  1711 BEGINAB  LA    R1,1(,R1)                                            01683001
000D8A 47F0 5174            00174  1712          B     TESTLOOP                                             01684001
                                   1713 *                                                                   01685001
                                   1714 *        BEGPROC                                                    01686001
                                   1715 *                                                                   01687001
                                   1716 *        PROCEDURE - SPECIFICATIONS - BEGIN HAS BEEN FOUND          01688001
                                   1717 *                                                                   01689001
                                   1718 *        PROC BODY IS TO COME. PROC IS CHANGED TO PROC*             01690001
                                   1719 *        ITS CHECKED THAT ALL PARAMETERS HAVE BEEN SPECIFIED        01691001
                                   1720 *        THE RETURN IS TO TEST VIA THE BEGIN PROGRAM                01692001
                                   1721 *                                                                   01693001
000D8E 9210 F000      00000        1722 BEGPROC  MVI   0(R15),X'10'            CONVERT PROC INTO PROC*      01694001
000D92 94BF DD8E      00D8E        1723          NI    BITS1,X'BF'             PROBIT=0                     01695001
000D96 9500 DD8D      00D8D        1724          CLI   PZ,0                    ALL PARAMETERS SPECIFIED ?   01696001
000D9A 4780 5D86            00D86  1725          BE    BEGINAB                 YES                          01697001
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  Active USINGs: WORKAREA,R13  IEX11000,R5,R8,R11

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

000D9E 45C0 57CE            007CE  1726          BAL   R12,ERROR10           NO, GENERATE E11                 01698001
000DA2 47F0 5D86            00D86  1727          B     BEGINAB                                                01699001
                                   1728 *                                                                     01700001
                                   1729 *        FIRSTBEG                                                     01701001
                                   1730 *                                                                     01702001
                                   1731 *        THE FIRST BEGIN IS CONSIDERED AS A BLOCK BEGIN               01703001
                                   1732 *        THE START BIT IS TURNED OFF                                  01704001
                                   1733 *        THE BEG1 PROGRAM IS JOINED                                   01705001
                                   1734 *        IF PRECOMPILED PROCEDURE HAS BEEN SPECIFID E42 IS GIVEN      01706001
                                   1735 *        AS A WARNING AND THE BEGIN IS DISREGARDED                    01707001
                                   1736 *                                                                     01708001
000DA6 9104 D080      00080        1737 FIRSTBEG TM    COMPFLGS,PROC         PRECOMPILED PROCEDURE ?          01709001
000DAA 4780 5DBC            00DBC  1738          BZ    FIRSTB01              NO, BRANCH                       01710001
000DAE 4560 578A            0078A  1739          BAL   R6,ERR7               YES, GIVE WARNING MESSAGE        01711001
                                   1740 *                                                                     01712001
000DB2 042A                        1741          DC    X'042A'                                                01713001
                                   1742 *                                                                     01714001
000DB4 4110 1001            00001  1743          LA    R1,1(,R1)             DISREGARD THE BEGIN              01715001
000DB8 47F0 5174            00174  1744          B     TESTLOOP                                               01716001
                                   1745 *                                                                     01717001
000DBC 9620 DD8F      00D8F        1746 FIRSTB01 OI    BITS2,X'20'           NO, TURN STARTBIT OFF            01718001
000DC0 4190 5174            00174  1747          LA    R9,TESTLOOP           MAKE RETURN FROM BEGI BE TEST    01719001
000DC4 4110 1001            00001  1748          LA    R1,1(,R1)                                              01720001
000DC8 47F0 5DDA            00DDA  1749          B     BEG1FRST              FIRST BEGIN = BLOCK BEGIN        01721001
                                   1750 *                                                                     01722001
                                   1751 *        BEGI                                                         01723001
                                   1752 *                                                                     01724001
                                   1753 *        BLOCK BEGIN PROGRAM                                          01725001
                                   1754 *                                                                     01726001
                                   1755 *        CHANGES BEGIN TO BETA IN STACK AND OUTPUT                    01727001
                                   1756 *        INCREASES ITAB GROUP NUMBER AND PROGRAM BLOCK NUMBER         01728001
                                   1757 *        ENTRIES ARE MADE IN -                                        01729001
                                   1758 *        GROUPTABEL                                                   01730001
                                   1759 *        SURROUNDING BLOCKS IG. NR                                    01731001
                                   1760 *        PBTAB1                                                       01732001
                                   1761 *        SURROUNDING PBN                                              01733001
                                   1762 *        SCTAB - CURRENTSC COUNTER                                    01734001
                                   1763 *        ITAB                                                         01735001
                                   1764 *        ADDRS OF SURROUNDING BLOCK AND IG HEAD ENTRIES, NEW          01736001
                                   1765 *        PBN AND IGN                                                  01737001
                                   1766 *        LPBP (ADDR OF CURRENT PROGRAM BLOCK HEAD ENTRY)              01738001
                                   1767 *        AND                                                          01739001
                                   1768 *        LIGP (ADDR OF CURRENT ITAB GROUP HEAD ENTRY)                 01740001
                                   1769 *        ARE UPDATED                                                  01741001
                                   1770 *        PUTS BETA + NEW PBN AND IGN TO OUTPUT REC.                   01742001
                                   1771 *                                                                     01743001
000DCC 0630                        1772 BEG1     BCTR  R3,0                                                   01744001
000DCE 947F DD8E      00D8E        1773          NI    BITS1,BEGOFF          BEGBIT 0                         01745001
000DD2 950C 3000      00000        1774          CLI   0(R3),X'0C'           BEGIN IN O/P ?                   01746001
000DD6 4770 581E            0081E  1775          BNE   ERROR21               NO, DECLARATION INCORRECT PLACE  01747001
000DDA 920D 3000      00000        1776 BEG1FRST MVI   0(R3),X'0D'           MOVE BETA TO O/P                 01748001
000DDE 58F0 DCD8            00CD8  1777          L     R15,SP                AND                              01749001
000DE2 9204 F000      00000        1778          MVI   0(R15),X'04'          STACK                            01750001
000DE6 1B66                        1779          SR    R6,R6                                                  01751001
000DE8 4860 DD4C            00D4C  1780          LH    R6,IGC                                                 01752001
000DEC 4160 6001            00001  1781          LA    R6,1(,R6)             INCREASE ITAB GROUP NUMBER       01753001
000DF0 4060 DD4C            00D4C  1782          STH   R6,IGC                                                 01754001
000DF4 1A66                        1783          AR    R6,R6                 ENTRY IS TO GO INTO              01755001
000DF6 4A60 DD4C            00D4C  1784          AH    R6,IGC                A(GT)+3*(IGC)                    01756001
000DFA 5A60 DD50            00D50  1785          A     R6,AGT                                                 01757001
000DFE 5870 DD6C            00D6C  1786          L     R7,LIGP                                                01758001
000E02 D201 6000 7008 00000 00008  1787          MVC   0(2,R6),8(R7)         ENTRY INTO GROUPTABLE            01759001
000E08 9200 6002      00002        1788          MVI   2(R6),0                                                01760001
000E0C 947F 6000      00000        1789          NI    0(R6),X'7F'           CLEAR POSSIBLE PHI IND           01761001
000E10 95FF DD84      00D84        1790          CLI   PBC,255               MORE THAN 255 BLOCKS ?           01762001
000E14 4770 5E1E            00E1E  1791          BNE   BEG1FAAA                                               01763001
000E18 4560 5724            00724  1792          BAL   R6,ERR4                                                01764001
                                   1793 *                                                                     01765001
000E1C 0416                        1794          DC    X'0416'               E22                              01766001
                                   1795 *                                                                     01767001
000E1E 4320 DD84            00D84  1796 BEG1FAAA IC    R2,PBC                                                 01768001
000E22 4120 2001            00001  1797          LA    R2,1(,R2)             INCR PROGRAM BLOCK NUMBER        01769001
000E26 4220 DD84            00D84  1798          STC   R2,PBC                                                 01770001
000E2A 5870 DD70            00D70  1799          L     R7,LPBP                                                01771001
000E2E 4160 D478            00478  1800          LA    R6,PBTAB1                                              01772001
000E32 1A62                        1801          AR    R6,R2                                                  01773001
000E34 D200 6000 700A 00000 0000A  1802          MVC   0(1,R6),10(R7)        ENTRY INTO PROGRAM BLOCK TABLE   01774001
000E3A 4220 3001            00001  1803          STC   R2,1(,R3)             TRANSFER PBN TO O/P              01775001
000E3E 1A22                        1804          AR    R2,R2                 MAKE ENTRY OF CURRENT            01776001
000E40 4162 8126            01126  1805          LA    R6,SCTAB(R2)          SEMCNT COUNTER IN SCTAB          01777001
000E44 D201 6000 D09C 00000 0009C  1806          MVC   0(2,R6),SEMCNT                                         01778001
000E4A D201 3002 DD4C 00002 00D4C  1807          MVC   2(2,R3),IGC           IGN IN OUTPUT BUFFER             01779001
000E50 4130 3004            00004  1808          LA    R3,4(,R3)                                              01780001
000E54 5030 DD58            00D58  1809          ST    R3,LAPIN              SET LABEL POINTERS               01781001
000E58 58F0 DD68            00D68  1810          L     R15,AITL              MAKE BLOCK HEAD IN ITAB          01782001
000E5C D203 F000 DD6C 00000 00D6C  1811          MVC   0(4,R15),LIGP                                          01783001
000E62 D203 F004 DD70 00004 00D70  1812          MVC   4(4,R15),LPBP                                          01784001
000E68 D201 F008 DD4C 00008 00D4C  1813          MVC   8(2,R15),IGC                                           01785001
000E6E D200 F00A DD84 0000A 00D84  1814          MVC   10(1,R15),PBC                                          01786001
000E74 50F0 DD70            00D70  1815          ST    R15,LPBP              UPDATE LIGP AND LPBP             01787001
000E78 50F0 DD6C            00D6C  1816          ST    R15,LIGP                                               01788001
000E7C 45C0 595A            0095A  1817          BAL   R12,ITABCLEA          CHECK AND CLEAR NEXT ITABENTRY   01789001
000E80 07F9                        1818          BR    R9                                                     01790001
                                   1819 *                                                                     01791001
                                   1820 *        END                                                          01792001
                                   1821 *                                                                     01793001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                   1822 *        ACTION DEPENDS ON WHAT IS IN THE STACK                         01794001
                                   1823 *                                                                       01795001
                                   1824 *        TURNS IN ALL CASES OFF THE DELTABIT AND THE END ELSE           01796001
                                   1825 *        BIT                                                            01797001
                                   1826 *        GENERAL RETURN POINT IS CSPEND IF RETURN ADDR, IN              01798001
                                   1827 *        R4, IS NOT CHANGED                                             01799001
                                   1828 *        FINAL RETURN IS TO TEST VIA SEMCO OR COMMENT PROGRAM           01800001
                                   1829 *        PROC** IN STACK ACTIVATES PBLOCKEND AND RETURNS TO END         01801001
                                   1830 *        TO INSPECT THE STACK AGAIN                                     01802001
                                   1831 *                                                                       01803001
000E82 94DF DD8E      00D8E        1832 END      NI    BITS1,X'DF'          DELTABIT.=0                         01804001
000E86 9180 DD8F      00D8F        1833          TM    BITS2,ENDBIT         END FINISHED FINAL END COMMENT ?    01805001
000E8A 4710 57C4            007C4  1834          BO    ERR9                 YES                                 01806001
000E8E 94FE DD8F      00D8F        1835          NI    BITS2,X'FE'          SET ENDELSE BIT TO ZERO             01807001
000E92 4140 5E92            00E92  1836 CSPEND   LA    R4,*                 RETURN FOR PBLCKEND, FOREND         01808001
000E96 58F0 DCD8            00CD8  1837          L     R15,SP                                                   01809001
000E9A 4320 F000            00000  1838          IC    R2,0(,R15)           BRANCH                              01810001
000E9E 5862 5EA4            00EA4  1839          L     R6,PROG1(R2)         DEPENDING ON TOP BYTE               01811001
000EA2 07F6                        1840          BR    R6                   OF THE STACK                        01812001
                                   1841 *                                                                       01813001
000EA4 0000079A                    1842 PROG1    DC    A(ERR8)              +00 E11 IF ALPHA                    01814001
000EA8 00000F42                    1843          DC    A(BLOCKEND)          +04 BETA                            01815001
000EAC 00000EE0                    1844          DC    A(COMPDEND)          +08 BEGIN                           01816001
000EB0 00000ECC                    1845          DC    A(PREND)             +12 PROC                            01817001
000EB4 00000EC0                    1846          DC    A(STAREND)           +16 PROC*                           01818001
000EB8 00000FB8                    1847          DC    A(PBLCKEND)          +20                                 01819001
000EBC 00000F4A                    1848          DC    A(FOREND)            +24 FOR                             01820001
                                   1849 *                                                                       01821001
                                   1850 *        STAREND                                                        01822001
                                   1851 *                                                                       01823001
                                   1852 *        PROC* HAS ENDED                                                01824001
                                   1853 *                                                                       01825001
                                   1854 *        ACTIVATES THE PBLOCK END PROGRAM AND RETURNS AFTERWARDS        01826001
                                   1855 *        TO TEST VIA COMMENT PROGRAM                                    01827001
                                   1856 *                                                                       01828001
000EC0 9620 DD8E      00D8E        1857 STAREND  OI    BITS1,X'20'          DELTABIT= 1                         01829001
000EC4 4140 8330            01330  1858          LA    R4,COMMEND           LOAD ADDR OF END ENTRY              01830001
                                   1859 *                                   INTO COMMENT PROGRAM                01831001
000EC8 47F0 5FB8            00FB8  1860          B     PBLCKEND                                                 01832001
                                   1861 *                                                                       01833001
                                   1862 *        PREND                                                          01834001
                                   1863 *        PROC HAS ENDED                                                 01835001
                                   1864 *                                                                       01836001
                                   1865 *        CHECKS IF ALL PARAMETERS SPECIFIED.                            01837001
                                   1866 *        TURNS OFF THE PROBIT.                                          01838001
                                   1867 *        A PROC THAT ENDS WITH 'END' IS NOT CORRECTED, THEREFORE        01839001
                                   1868 *        THE STACK IS AGAIN INSPECTED AFTER THE PBLOCKEND PROGRAM       01840001
                                   1869 *        HAS BEEN ACTIVATED                                             01841001
                                   1870 *                                                                       01842001
000ECC 94BF DD8E      00D8E        1871 PREND    NI    BITS1,X'BF'          PROBIT.=0                           01843001
000ED0 9500 DD8D      00D8D        1872          CLI   PZ,0                 ALL PARAMETERS SPECIFIED ?          01844001
000ED4 4780 5FB8            00FB8  1873          BE    PBLCKEND             YES, ACTIVATE PBLCKEND              01845001
000ED8 45C0 57CE            007CE  1874          BAL   R12,ERROR10          NO, GENERATE E10 FIRST              01846001
000EDC 47F0 5FB8            00FB8  1875          B     PBLCKEND                                                 01847001
                                   1876 *                                                                       01848001
                                   1877 *        COMPDEND                                                       01849001
                                   1878 *                                                                       01850001
                                   1879 *        A COMPOUND STATMENT HAS ENDED                                  01851001
                                   1880 *                                                                       01852001
                                   1881 *        TRANSFERS END '2C' TO OUTPUT AND RELEASES BEGIN IN             01853001
                                   1882 *        STACK.                                                         01854001
                                   1883 *        THEN IT CHECKS IF THE END OF THIS COMPOUND STATEMENT           01855001
                                   1884 *        INDICATES THE END OF ANY FOR STATMENT(S) OR PROC**.            01856001
                                   1885 *        THIS IS DONE WITH BITS2 X'01' AND THE COMMENT PROGRAM.         01857001
                                   1886 *        IF THE END IS FOLLOWED BY A ., OR 'END' THE STACK IS           01858001
                                   1887 *        INSPECTED AGAIN.                                               01859001
                                   1888 *        IF THE END IS FOLLOWED BY AN 'ELSE' THE COMPOUND               01860001
                                   1889 *        STATMENT ITSELF IS ALL THAT HAS ENDED AT THIS POINT.           01861001
                                   1890 *                                                                       01862001
000EE0 45C0 598C            0098C  1891 COMPDEND BAL   R12,COB              CHECK IF O/P AREA FILLED            01863001
000EE4 922C 3000      00000        1892          MVI   0(R3),XFEND          TRANSFER END TO OUTPUT BUFFER       01864001
000EE8 4130 3001            00001  1893          LA    R3,1(,R3)            INCR OUTPUT POINTER                 01865001
000EEC 58F0 DCD8            00CD8  1894          L     R15,SP               RELEASE BEGIN IN                    01866001
000EF0 06F0                        1895          BCTR  R15,0                STACK                               01867001
000EF2 50F0 DCD8            00CD8  1896          ST    R15,SP                                                   01868001
000EF6 9500 F000      00000        1897 COMPENDI CLI   0(R15),X'00'         ALPHA IN STACK ?                    01869001
000EFA 4780 8108            01108  1898          BE    PGMEND               YES, LOGICAL PROGRAM END            01870001
000EFE 9514 F000      00000        1899          CLI   0(R15),X'14'         PROC** ?                            01871001
000F02 4740 8330            01330  1900          BL    COMMEND              BRANCH TO COM-PROGRAM, END-ENTRY    01872001
                                   1901 *                                   FOR BEGIN OR BETA OR PROC*          01873001
                                   1902 *                                   IN STACK                            01874001
000F06 9601 DD8F      00D8F        1903          OI    BITS2,X'01'          SET END-ELSE BIT                    01875001
000F0A 47F0 8330            01330  1904          B     COMMEND              CHECK HOW END COMMENT ENDS          01876001
                                   1905 *                                   DCOMMENT ENDED WITH A SEMICOLON     01877001
000F0E 94FE DD8F      00D8F        1906 COMPEND2 NI    BITS2,X'FE'          RESET END ELSE BIT                  01878001
000F12 58F0 DCD8            00CD8  1907          L     R15,SP               INSPECT STACK AGAIN                 01879001
000F16 9514 F000      00000        1908          CLI   0(R15),X'14'         PROC** OR FOR IN STACK ?            01880001
000F1A 4780 5F26            00F26  1909          BE    COMPEND3             PROC**                              01881001
000F1E 4140 5F32            00F32  1910          LA    R4,COMPEND4          FOR GOTO FORENS AND THEN            01882001
000F22 47F0 5F4A            00F4A  1911          B     FOREND               TEST AGAIN - COMPEND4               01883001
                                   1912 *                                                                       01884001
000F26 9620 DD8E      00D8E        1913 COMPEND3 OI    BITS1,X'20'          PROC**- SET DELTABIT                01885001
000F2A 4140 55D4            005D4  1914          LA    R4,SEMCO             RETURN FROM PBLCKEND                01886001
000F2E 47F0 5FB8            00FB8  1915          B     PBLCKEND             BLOCKEND FOR PROC**                 01887001
                                   1916 *                                                                       01888001
000F32 9514 F000      00000        1917 COMPEND4 CLI   0(R15),X'14'         PROC**,FOR OR SE ?                  01889001
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  Active USINGs: WORKAREA,R13  IEX11000,R5,R8,R11

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

000F36 4780 5F26            00F26  1918          BE    COMPEND3               PROC**                 01890001
000F3A 4720 5F4A            00F4A  1919          BH    FOREND                 FOR                    01891001
000F3E 47F0 55D4            005D4  1920          B     SEMCO                  SOMETHING ELSE         01892001
                                   1921 *                                                            01893001
                                   1922 *        BLOCKEND                                            01894001
                                   1923 *                                                            01895001
                                   1924 *        A BETA BLOCK HAS ENDED                              01896001
                                   1925 *                                                            01897001
                                   1926 *        THE RETURN AFTER THE PBLOCKEND PROGRAM IS TO THE    01898001
                                   1927 *        COMPENDI TO CHECK IF SOME MORE ITAB GROUP SHOULD END AT 01899001
                                   1928 *        THIS POINT                                          01900001
                                   1929 *                                                            01901001
000F42 4540 5FB8            00FB8  1930 BLOCKEND BAL   R4,PBLCKEND            EXECUTE PROGRAM BLOCKEND 01902001
000F46 47F0 5EF6            00EF6  1931          B     COMPENDI                                      01903001
                                   1932 *                                                            01904001
                                   1933 *        FOREND                                              01905001
                                   1934 *                                                            01906001
                                   1935 *        CORRECTS THE LIGP POINTER                           01907001
                                   1936 *                                                            01908001
                                   1937 *        INSERTS A CONTINUATION LINE IN ITAB IF THE FORSTATMENT 01909001
                                   1938 *        CONTAINED ANY LABEL.                                01910001
                                   1939 *        IF THE FORSTATMENT DID NOT CONTAIN ANY DEKLARATIONS THE 01911001
                                   1940 *        PREVIOUSC CREATED FOR HEADENTRY IS ERASED.          01912001
                                   1941 *        IF ONE CONTINUATION LINE IS CREATED, FOLLOWING      01913001
                                   1942 *        ENCLOSING FORSTATEMENTS WILL OVERLAY THE FIRST      01914001
                                   1943 *        CONTINUATION LINE, IF LABELS OR NOT ETA AND SURROVNDING 01915001
                                   1944 *        ITABGROUPS IG NR. IS MOVED TO THE OUTPUT            01916001
                                   1945 *        FOR IS RELEASED IN THE STACK                        01917001
                                   1946 *                                                            01918001
                                   1947 *        ENTERED FROM SEMCO, END                             01919001
                                   1948 *        EXITS TO END, COMPEND4, STACKTST (IN SEMCO)         01920001
                                   1949 *                                                            01921001
000F4A 5860 DD6C            00D6C  1950 FOREND   L     R6,LIGP                                       01922001
000F4E D203 DD6C 6000 00D6C 00000  1951          MVC   LIGP(4),0(R6)          GET PREVIOUS LIGP HEAD 01923001
000F54 58F0 DD68            00D68  1952          L     R15,AITL               CURRENT ENTRY          01924001
000F58 5BF0 BD38            02D38  1953          S     R15,KF11               MINUS ELEVEN           01925001
000F5C 91FF F006      00006        1954          TM    6(R15),X'FF'           CONTINUATION LINE NEEDED ? 01926001
000F60 4780 5F8A            00F8A  1955          BZ    EMPTYFOR               NO                     01927001
000F64 4710 5F6C            00F6C  1956          BO    FORENDAA               OVERLAY PREVIOUS CONT LINE 01928001
000F68 41F0 F00B            0000B  1957          LA    R15,11(,R15)           CREATE NEW CONT LINE   01929001
000F6C 5860 DD6C            00D6C  1958 FORENDAA L     R6,LIGP                                       01930001
000F70 D201 F008 6008 00008 00008  1959          MVC   8(2,R15),8(R6)         COPY IG NUMBER         01931001
000F76 92FF F006      00006        1960          MVI   6(R15),X'FF'           CONTINUATION LINE INDICATOR 01932001
000F7A 947F F008      00008        1961          NI    8(R15),X'7F'           CLEAR POSSIBLE PHI INDICATOR 01933001
000F7E 922B F005      00005        1962          MVI   5(R15),XFBLANK                                01934001
000F82 45C0 595E            0095E  1963          BAL   R12,ITABCLEA+4         CLEAR NEXT ENTRY       01935001
000F86 47F0 5F8E            00F8E  1964          B     EMPTYFAA                                      01936001
                                   1965 *                                                            01937001
000F8A 45C0 5962            00962  1966 EMPTYFOR BAL   R12,ITABCLEC           CLEAR FORHEAD FOR EMPTY FORGROUP 01938001
000F8E 4100 3003            00003  1967 EMPTYFAA LA    R0,3(,R3)                                     01939001
000F92 45C0 5982            00982  1968          BAL   R12,COBSPEC            CHECK IF ENOUGH SPACE IN O/P 01940001
000F96 922B 3000      00000        1969          MVI   0(R3),XFBLANK          INSERT ETA             01941001
000F9A 5860 DD6C            00D6C  1970          L     R6,LIGP                                       01942001
000F9E D201 3001 6008 00001 00008  1971          MVC   1(2,R3),8(R6)          AND CURRENT IGN IN OUTPUT BUFFER 01943001
000FA4 947F 3001      00001        1972          NI    1(R3),X'7F'            CLEAR EVENTUALLY PHI   01944001
000FA8 4130 3003            00003  1973          LA    R3,3(,R3)                                     01945001
000FAC 58F0 DCD8            00CD8  1974          L     R15,SP                 RELEASE FOR IN STACK   01946001
000FB0 06F0                        1975          BCTR  R15,0                                         01947001
000FB2 50F0 DCD8            00CD8  1976          ST    R15,SP                                        01948001
000FB6 07F4                        1977          BR    R4                     RETURN                 01949001
                                   1978 *                                                            01950001
                                   1979 *        PBLCKEND                                            01951001
                                   1980 *                                                            01952001
                                   1981 *        ERASES EMPTY CONTINUATION LINES                     01953001
                                   1982 *        WRITES OUT THE PROGRAM BLOCK TO SYSUT3              01954001
                                   1983 *        LENGTH IS CALCULATED AND SAVED IN ITABLEN AND STORED IN 01955001
                                   1984 *        THE FIRST TWO BYTES OF THE ITAB RECORD              01956001
                                   1985 *        SEMCNT IS PICKED UP FROM SCTAB AND ENTERED IN BYTES 6+7 01957001
                                   1986 *        THE BLOCK IS MOVED TO THE ITAB BUFFER WHERE IT      01958001
                                   1987 *        IS WRITTEN OUT                                      01959001
                                   1988 *        THE SURROUNDING BLOCKS NEW DECLARATIONS WILL BE     01960001
                                   1989 *        OVERLAYING THE OUTWRITTEN RECORD                    01961001
                                   1990 *        AITL WILL POINT TO THE HEADENTRY'S PLACE OF THE BLOCK 01962001
                                   1991 *        WHICH NOW WAS WRITTEN OUT                           01963001
                                   1992 *        LPBP TO THE SURROUNDING BLOCKS HEADENTRY            01964001
                                   1993 *        LIGP TO THE SURROUNDING ITABGROUPS HEADENTRY        01965001
                                   1994 *        AITL, LPBP AND LIGP WILL BE MODIFIED ACCORDINLY     01966001
                                   1995 *        EPSILON, THE SURROUNDING BLOCKS PBN AND IGN WILL BE PUT 01967001
                                   1996 *        TO THE OUTPUT                                       01968001
                                   1997 *        THE BLOCK INDICATOR IN THE STACK WILL BE RELEASED IF 01969001
                                   1998 *        STACK NOW IS EMPTY - ALPHA IN STACK - PGMEND WILL SET 01970001
                                   1999 *        THE END BIT AND CHANGE END OF DATA EXIT TO EODADIN. THIS 01971001
                                   2000 *        WILL CAUSE THE COMMENT PROGRAM TO CHECK FOR AN CORRECT 01972001
                                   2001 *        ENDCOMMENT BUT NOTHING MORE IS TO BE PROCESSED.     01973001
                                   2002 *        FOR PROGRAM BLOCK 0, IF ANY, THE BLOCK WILL ONLY BE 01974001
                                   2003 *        WRITTEN OUT AND NO FURTHER ACTIONS TAKEN.           01975001
                                   2004 *                                                            01976001
                                   2005 *        ENTERED FROM END (BETA, PROC*), SEMCO (PROC, PROC**) 01977001
                                   2006 *                                                            01978001
                                   2007 *        EXITS TO COMMEND (NORMAL), COMPEND4 (PROC OR PROC** 01979001
                                   2008 *        FOLLOWED BY END), TERMINATION (NOPBN0)              01980001
                                   2009 *                                                            01981001
000FB8 58F0 DD68            00D68  2010 PBLCKEND L     R15,AITL                                      01982001
000FBC 5BF0 BD38            02D38  2011 PBLCKEAA S     R15,KF11               SUBTRACT 11 TO EARSE   01983001
000FC0 9500 F006      00006        2012          CLI   6(R15),0               EMPTY                  01984001
000FC4 4780 5FBC            00FBC  2013          BE    PBLCKEAA               CONTINUATION           01985001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12

000FC8 41F0 F00B              0000B  2014          LA    R15,11(,R15)                                                 01986001
000FCC 5BF0 DD70              00D70  2015 WRTITAB  S     R15,LPBP                 COMPUTE LENGTH OFITAB SECTION       01987001
000FD0 50F0 DD78              00D78  2016          ST    R15,ITABLEN                                                  01988001
000FD4 59F0 BD50              02D50  2017          C     R15,KF2000               ITAB SECTION TOO LONG ?             01989001
000FD8 4740 5FE2              00FE2  2018          BL    WRTITABA                 NO, BYPASS ERROR                    01990001
000FDC 4560 5724              00724  2019          BAL   R6,ERR4                                                      01991001
                                     2020 *                                                                           01992001
000FE0 0426                          2021          DC    X'0426'                  E38 MORE THAN 184 IDENTIFIERS       01993001
                                     2022 *                                                                           01994001
000FE2 D203 DD68 DD70 00D68 00D70    2023 WRTITABA MVC   AITL(4),LPBP             UPDATE AITL                         01995001
000FE8 5860 DD70              00D70  2024          L     R6,LPBP                                                      01996001
000FEC D203 DD6C 6000 00D6C 00000    2025          MVC   LIGP(4),0(R6)            UPDATE LIGP                         01997001
000FF2 D203 DD70 6004 00D70 00004    2026          MVC   LPBP(4),4(R6)            UPDATE LPBP                         01998001
000FF8 D201 6000 DD7A 00000 00D7A    2027          MVC   0(2,R6),ITABLEN+2        INSERT LENGTH IN HEADENTRY          01999001
000FFE 922B 6005        00005        2028          MVI   5(R6),XFBLANK                                                02000001
001002 90E3 BDC8              02DC8  2029          STM   R14,R3,SAVE1             SAVE REGISTERS                      02001001
001006 1B22                          2030          SR    R2,R2                                                        02002001
001008 4320 600A              0000A  2031          IC    R2,10(,R6)               GET CORRENT PBN                     02003001
00100C 1A22                          2032          AR    R2,R2                    INSERT SEMCNT AT BLOCKSTART         02004001
00100E 4172 8126              01126  2033          LA    R7,SCTAB(R2)             IN HEADING                          02005001
001012 D201 6006 7000 00006 00000    2034          MVC   6(2,R6),0(R7)                                                02006001
001018 9108 DD8F        00D8F        2035          TM    BITS2,X'08'              PB0 ?                               02007001
00101C 4780 8028              01028  2036          BZ    WRTITABB                 NO                                  02008001
001020 9200 6006        00006        2037          MVI   6(R6),0                  CORRECT SEMCNT                      02009001
001024 9200 6007        00007        2038          MVI   7(R6),0                  FOR PB0                             02010001
001028 9110 DD90        00D90        2039 WRTITABB TM    BITS3,FRSITB             FIRST BLOCK TO BE WRITTEN ?         02011001
00102C 4780 8118              01118  2040          BZ    WRT1                     YES, DO NOT CHECK                   02012001
001030 90EF BD74              02D74  2041          STM   R14,R15,ERRSAVE          CHECK PREVIOUS WRITE                02013001
                                     2042 *                                                                           02014001
                                     2043          CHECK ITABC                                                        02015001
001034 4110 8084              01084  2044+         LA    1,ITABC                           LOAD PARAMETER REG 1       02-IHBIN
001038 58E0 1008              00008  2045+         L     14,8(0,1)                 PICK UP DCB ADDR                   01-CHECK
00103C 58F0 E034              00034  2046+         L     15,52(0,14)               LOAD CHECK ROUTINE ADDR            01-CHECK
001040 05EF                          2047+         BALR  14,15                     LINK TO CHECK ROUTINE              01-CHECK
                                     2048 *                                                                           02016001
001042 98EF BD74              02D74  2049          LM    R14,R15,ERRSAVE                                              02017001
001046 5870 DCC4              00CC4  2050 WRT      L     R7,AITABBUF              ADDR OF BUFFER                      02018001
00104A 59F0 BD68              02D68  2051 COMPARE1 C     R15,KF256                MORE THAN 256 BYTES TO MOVE ?       02019001
00104E 4740 806C              0106C  2052          BL    EXMVC1                   NO, MOVE ALL AT ONCE                02020001
001052 D2FF 7000 6000 00000 00000    2053 COMPARE2 MVC   0(256,R7),0(R6)          YES, MOVE A SECTION OF 256          02021001
001058 4160 6100              00100  2054          LA    R6,256(,R6)              BYTES AT A TIME                     02022001
00105C 4170 7100              00100  2055          LA    R7,256(,R7)                                                  02023001
001060 5BF0 BD68              02D68  2056          S     R15,KF256                                                    02024001
001064 59F0 BD68              02D68  2057          C     R15,KF256                STILL MORE THAN 256 LEFT ?          02025001
001068 4720 8052              01052  2058          BH    COMPARE2                 YES, MOVE NEXT SECTION              02026001
00106C 44F0 8120              01120  2059 EXMVC1   EX    R15,MOVE4                MOVE A SECTION OF LESS THAN 256     02027001
001070 413F 7000              00000  2060          LA    R3,0(R15,R7)                                                 02028001
001074 5870 DCC4              00CC4  2061          L     R7,AITABBUF              LOAD ADDR OF ITAB BUFFER            02029001
001078 58F0 D06C              0006C  2062          L     R15,AUT3DCB                           SYSUT3 DCB             02030001
00107C 58E0 DD78              00D78  2063          L     R14,ITABLEN                           LENGTH                 02031001
                                     2064 *                                                                           02032001
                                     2065          WRITE ITABC,SF,(R15),(R7),(R14)                                    02033001
001080                               2066+         CNOP  0,4                                                          02-IHBRD
001080 4510 8098              01098  2067+         BAL   1,*+24                    LOAD DECB ADDRESS                  02-IHBRD
001084 00000000                      2068+ITABC    DC    F'0'                               EVENT CONTROL BLOCK       02-IHBRD
001088 00                            2069+         DC    X'00'                              TYPE FIELD                02-IHBRD
001089 20                            2070+         DC    X'20'                              TYPE FIELD                02-IHBRD
00108A 0000                          2071+         DC    AL2(0)                             LENGTH                    02-IHBRD
00108C 00000000                      2072+         DC    A(0)                               DCB ADDRESS               02-IHBRD
001090 00000000                      2073+         DC    A(0)                               AREA ADDRESS              02-IHBRD
001094 00000000                      2074+         DC    A(0)                               RECORD POINTER WORD       02-IHBRD
001098 50F1 0008              00008  2075+         ST    R15,8(1,0)                         STORE DCB ADDRESS         02-IHBRD
00109C 5071 000C              0000C  2076+         ST    R7,12(1,0)                         STORE AREA ADDRESS        02-IHBRD
0010A0 40E1 0006              00006  2077+         STH   R14,6(1,0)                STORE LENGTH                       02-IHBRD
0010A4 58F1 0008              00008  2078+         L     15,8(1,0)                 LOAD DCB ADDRESS                   02-IHBRD
0010A8 58F0 F030              00030  2079+         L     15,48(0,15)                        LOAD RDWR ROUTINE ADDR 02-IHBRD
0010AC 05EF                          2080+         BALR  14,15                              LINK TO RDWR ROUTINE      02-IHBRD
                                     2081 *                                                                           02034001
0010AE 98E3 BDC8              02DC8  2082          LM    R14,R3,SAVE1                                                 02035001
0010B2 9108 DD8F        00D8F        2083          TM    BITS2,X'08'              PB0 WAS WRITTEN ?                   02036001
0010B6 0714                          2084          BOR   R4                       BRANCH BACK IF TERBIT ON            02037001
0010B8 5860 DD68              00D68  2085          L     R6,AITL                  CLEAR                               02038001
0010BC 9200 6000        00000        2086          MVI   0(R6),0                  NEXT                                02039001
0010C0 D209 6001 6000 00001 00000    2087          MVC   1(10,R6),0(R6)           ITABENTRY                           02040001
0010C6 4100 3004              00004  2088          LA    R0,4(,R3)                                                    02041001
0010CA 45C0 5982              00982  2089          BAL   R12,COBSPEC              CHECK IF ENOUGH SPACE IN O/P        02042001
0010CE 922A 3000        00000        2090          MVI   0(R3),X'2A'              INSERT EPSILON                      02043001
0010D2 5860 DD70              00D70  2091          L     R6,LPBP                                                      02044001
0010D6 D200 3001 600A 00001 0000A    2092          MVC   1(1,R3),10(R6)                     PBN                       02045001
0010DC 5860 DD6C              00D6C  2093          L     R6,LIGP                                                      02046001
0010E0 D201 3002 6008 00002 00008    2094          MVC   2(2,R3),8(R6)                      IGN                       02047001
0010E6 947F 3002        00002        2095          NI    2(R3),X'7F'              CLEAR FIRST BIT OF IGN (PHI IND)    02048001
0010EA 4130 3004              00004  2096          LA    R3,4(,R3)                                                    02049001
0010EE 58F0 DCD8              00CD8  2097          L     R15,SP                   RELEASE                             02050001
0010F2 06F0                          2098          BCTR  R15,0                    TOPBYTE                             02051001
0010F4 50F0 DCD8              00CD8  2099          ST    R15,SP                   IN STACK                            02052001
0010F8 9101 DD8E        00D8E        2100          TM    BITS1,X'01'              TERMINATION BIT ON ?                02053001
0010FC 0714                          2101          BOR   R4                       YES, RETURN TO ENDMISS PGM          02054001
0010FE 9500 F000        00000        2102          CLI   0(R15),0                 STACK EMPTY ?                       02055001
001102 4780 8108              01108  2103          BE    PGMEND                   YES, LOGICAL PROGRAM ENP            02056001
001106 07F4                          2104          BR    R4                       RETURN                              02057001
                                     2105 *                                                                           02058001
001108 9680 DD8F        00D8F        2106 PGMEND   OI    BITS2,ENDBIT             SET ENDBIT                          02059001
00110C 41C0 B3B2              023B2  2107          LA    R12,EODADIN              NEW EOD ADDR                        02060001
001110 50C0 D07C              0007C  2108          ST    R12,EODIN                                                    02061001
001114 47F0 8330              01330  2109          B     COMMEND                                                      02062001
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                                     2110 *                                                                     02063001
001118 9610 DD90        00D90        2111 WRT1     OI    BITS3,FRSITB           DON'T CHECK FIRST TIME          02064001
00111C 47F0 8046              01046  2112          B     WRT                                                    02065001
                                     2113 *                                                                     02066001
001120 D200 7000 6000 00000 00000    2114 MOVE4    MVC   0(1,R7),0(R6)          PBLCKEND MOVE FOR ITAB          02067001
                                     2115 *                                                                     02068001
001126 0000000000000000              2116 SCTAB    DC    XL256'00'                                              02069001
001226 0000000000000000              2117          DC    XL254'00'                                              02070001
                                     2118 *                                                                     02071001
                                     2119 *        COMMENT                                                      02072001
                                     2120 *                                                                     02073001
                                     2121 *        THREE ENTRIES -                                              02074001
                                     2122 *        1. COM FOR THE ALGOL WORD COMMENT                            02075001
                                     2123 *           SETS CODIT=1, CHECKS THAT COMMENT IS IN A LEGAL           02076001
                                     2124 *           POSITION                                                  02077001
                                     2125 *        2. COMERR FOR ERRORS IN DECLARATIONS                         02078001
                                     2126 *           ALL CHARACTERS TO NEXT SEMICOLON WILL BE SKIPPED          02079001
                                     2127 *           SET COBIT AND DELTABIT = 1                                02080001
                                     2128 *        3. COMMEND ENTERED AFTER AN END IS FOUND                     02081001
                                     2129 *           SKIPS ALL CHARACTERS TO NEXT ; OR END OR ELSE SETS        02082001
                                     2130 *           THE COBIT = 0                                             02083001
                                     2131 *                                                                     02084001
001324 9640 DD8F        00D8F        2132 COMERR   OI    BITS2,X'40'            SET COBIT AND                   02085001
001328 9620 DD8E        00D8E        2133          OI    BITS1,X'20'            DELTABIT ON                     02086001
00132C 47F0 8370              01370  2134          B     COMCEE2                                                02087001
                                     2135 *                                                                     02088001
001330 94BF DD8F        00D8F        2136 COMMEND  NI    BITS2,X'BF'            SET COBIT TO 0                  02089001
001334 47F0 836C              0136C  2137          B     COMCED2                                                02090001
                                     2138 *                                                                     02091001
001338 9640 DD8F        00D8F        2139 COM      OI    BITS2,X'40'            SET COBIT TO I                  02092001
00133C 1843                          2140          LR    R4,R3                                                  02093001
00133E 0640                          2141          BCTR  R4,0                                                   02094001
001340 950C 4000        00000        2142          CLI   0(R4),X'0C'            BEGIN IN O/P ?                  02095001
001344 4780 836C              0136C  2143          BE    COMCED2                                                02096001
001348 0640                          2144          BCTR  R4,0                                                   02097001
00134A 0640                          2145          BCTR  R4,0                                                   02098001
00134C 950B 4000        00000        2146          CLI   0(R4),X'0B'            BETA IN O/P ?                   02099001
001350 4780 836C              0136C  2147          BE    COMCED2                                                02100001
001354 9529 4000        00000        2148          CLI   0(R4),XFDELTA          DELTA IN O/P ?                  02101001
001358 4780 836C              0136C  2149          BE    COMCED2                                                02102001
00135C 0640                          2150          BCTR  R4,0                                                   02103001
00135E 950D 4000        00000        2151          CLI   0(R4),X'0D'            SEMICOLON IN O/P ?              02104001
001362 4780 836C              0136C  2152          BE    COMCED2                                                02105001
001366 4560 578A              0078A  2153          BAL   R6,ERR7                E18                             02106001
                                     2154 *                                                                     02107001
00136A 0412                          2155          DC    X'0412'                                                02108001
                                     2156 *                                                                     02109001
00136C 4110 1001              00001  2157 COMCED2  LA    R1,1(,R1)              INCR R1                         02110001
001370 0590                          2158 COMCEE2  BALR  R9,0                                                   02111001
001372 1B22                          2159          SR    R2,R2                                                  02112001
001374 DD48 1000 BB30 00000 02B30    2160          TRT   0(73,R1),COMTABLE      SCAN THE COMMENT                02113001
00137A 4142 9000              00000  2161          LA    R4,0(R2,R9)            BRANCH WITH OFFSET FROM COMTABLE 02114001
00137E 07F4                          2162          BR    R4                     TO APPROPRIATE ROUTINE          02115001
                                     2163 *                                                                     02116001
                                     2164 ********************************************************************** 02117001
                                     2165 *                                                                     02118001
                                     2166 *        ROUTINES COMAPOST, COMZETA, COMPOINT AND COMSEMCO            02119001
                                     2167 *        ARE ADDRESSED AS OFFSETS FROM COMCEE2 VIA COMTABLE           02120001
                                     2168 *                                                                     02121001
                                     2169 *        COMAPOST                                                     02122001
                                     2170 *                                                                     02123001
                                     2171 *        IF AN END COMMENT IS PROCESSED, COBIT= 0, CHECK IF           02124001
                                     2172 *        APOSTROPHE IS THE START OF END OR ELSE OTHERWISE RETURN      02125001
                                     2173 *        TO SCAN THE COMMENT AGAIN                                    02126001
                                     2174 *                                                                     02127001
001380 9140 DD8F        00D8F        2175 COMAPOST TM    BITS2,X'40'            COBIT ON ?                      02128001
001384 4710 836C              0136C  2176          BO    COMCED2                YES, RETURN TO SCANNING AGAIN   02129001
001388 92FF DD81        00D81        2177          MVI   FBYTE,X'FF'            SET FBYTE                       02130001
00138C 47F0 5304              00304  2178          B     ENTRAPR                RETURN TO APOSTROE PROGRAM      02131001
                                     2179 *                                                                     02132001
001390 47F0 5A28              00A28  2180 COMZETA  B     CIB                    ZETA - RETURN TO COMERR         02133001
                                     2181 *                                                                     02134001
                                     2182 *        COMPOINT                                                     02135001
                                     2183 *                                                                     02136001
                                     2184 *        CHECK FOR SEMICOLON ., IF NOT RETURN                         02137001
                                     2185 *                                                                     02138001
001394 4160 8370              01370  2186 COMPOINT LA    R6,COMCEE2              RETURN IF NOT SEMCOLON         02139001
001398 45C0 5912              00912  2187          BAL   R12,FINDSEMC                                           02140001
                                     2188 *                                                                     02141001
                                     2189 *        COMSEMCO                                                     02142001
                                     2190 *                                                                     02143001
                                     2191 *        ENDELSE BIT ON -                                             02144001
                                     2192 *        END COMMENT AFTER BEGIN OR BETA ENDED WITH A ., MEANS        02145001
                                     2193 *        THAT THE END MIGHT ALSO CLOSE AN FOR STATEMENT OR A          02146001
                                     2194 *        PROCEDURE.                                                   02147001
                                     2195 *        ENDBIT ON -                                                  02148001
                                     2196 *        FINAL END HAS BEEN REACHED NOTHING IS TO FOLLOW THIS         02149001
                                     2197 *        COMMENT IN THE CORRECT CASE.                                 02150001
                                     2198 *        AN SEMICOLON AFTER AN COMMENT IS NOT TO BE COUNTED THAT      02151001
                                     2199 *        IS COBIT= 1 AND DELTABIT=0 RETURN TO TEST OTHERWISE          02152001
                                     2200 *        RETURN VIA SEMICOLON PROGRAM                                 02153001
                                     2201 *                                                                     02154001
00139C 9101 DD8F        00D8F        2202 COMSEMCO TM    BITS2,X'01'            END ELSE BIT ?                  02155001
0013A0 4710 5F0E              00F0E  2203          BO    COMPEND2               YES                             02156001
0013A4 9180 DD8F        00D8F        2204          TM    BITS2,ENDBIT           FINAL END COMMENT HAS ENDED ?   02157001
0013A8 4710 B376              02376  2205          BO    READROUT               YES, OK                         02158001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

0013AC 9140 DD8F      00D8F        2206          TM    BITS2,X'40'         COMMENT ?                   02159001
0013B0 4780 55D4            005D4  2207          BZ    SEMCO               NO                          02160001
0013B4 9120 DD8E      00D8E        2208          TM    BITS1,X'20'         DELIMITER ERROR ?           02161001
0013B8 4710 55D4            005D4  2209          BO    SEMCO               YES                         02162001
0013BC 4110 1001            00001  2210          LA    R1,1(,R1)           FOR A COMMENT SKIP SEMICOLON 02163001
0013C0 47F0 5174            00174  2211          B     TESTLOOP                                        02164001
                                   2212 *                                                              02165001
                                   2213 ********************************************************************** 02166001
                                   2214 *                                                              02167001
                                   2215 *        FOR                                                   02168001
                                   2216 *                                                              02169001
                                   2217 *        INCREASES IG AND FSN NUMBER                           02170001
                                   2218 *        MAKES ENTRIES IN SCOPE AND GROUPTABE                  02171001
                                   2219 *        MOVES FOR (18) TO OUTPUT FOLLOWED BY NEW IG NUMBER    02172001
                                   2220 *        CHECKS IF PROC IN STACK, IF YES PROC IS CHANGED TO    02173001
                                   2221 *        PROC**                                                02174001
                                   2222 *        PUTS FOR IN STACK                                     02175001
                                   2223 *        AN FORHEAD ENTRY IS MADE IN ITAB                      02176001
                                   2224 *        THE RETURN IS TO TEST                                 02177001
                                   2225 *                                                              02178001
0013C4 4100 3003            00003  2226 FOR      LA    R0,3(,R3)                                       02179001
0013C8 45C0 5982            00982  2227          BAL   R12,COBSPEC         CHECK IF ENOUGH SPACE IN O/P 02180001
0013CC 48F0 DD4C            00D4C  2228          LH    R15,IGC             INCREASE ITAB GROUP NUMBER  02181001
0013D0 41F0 F001            00001  2229          LA    R15,1(,R15)                                     02182001
0013D4 9218 3000      00000        2230          MVI   0(R3),XFFOR         MOVE 'FOR'                  02183001
0013D8 40F0 DD4C            00D4C  2231          STH   R15,IGC             AND IGN                     02184001
0013DC D201 3001 DD4C 00001 00D4C  2232          MVC   1(2,R3),IGC                                     02185001
0013E2 4130 3003            00003  2233          LA    R3,3(,R3)           TO OUTPUT BUFFER            02186001
0013E6 95FF DD82      00D82        2234          CLI   FSN,255             > 255 FOR STATEMENTS ?      02187001
0013EA 4770 83F4            013F4  2235          BNE   FORAA                                           02188001
0013EE 4560 5724            00724  2236          BAL   R6,ERR4                                         02189001
                                   2237 *                                                              02190001
0013F2 0429                        2238          DC    X'0429'             E41                         02191001
                                   2239 *                                                              02192001
0013F4 4320 DD82            00D82  2240 FORAA    IC    R2,FSN              INCREASE FSN                02193001
0013F8 4120 2001            00001  2241          LA    R2,1(,R2)                                       02194001
0013FC 4220 DD82            00D82  2242          STC   R2,FSN                                          02195001
001400 41C0 D5CF            005CF  2243          LA    R12,SPTAB-1                                     02196001
001404 1AC2                        2244          AR    R12,R2                                          02197001
001406 58F0 DD70            00D70  2245          L     R15,LPBP                                        02198001
00140A D200 C000 F00A 00000 0000A  2246          MVC   0(1,R12),10(R15)    MAKE ENTRY IN SCOUP TABLE   02199001
001410 947F DD8E      00D8E        2247          NI    BITS1,X'7F'         BEGBIT= 0                   02200001
001414 58C0 DCD8            00CD8  2248          L     R12,SP                                          02201001
001418 59C0 DD48            00D48  2249          C     R12,ATOPSTAK        STACK OVERFLOW ?            02202001
00141C 4740 8426            01426  2250          BL    FORBB                                           02203001
001420 4560 5724            00724  2251          BAL   R6,ERR4                                         02204001
                                   2252 *                                                              02205001
001424 0414                        2253          DC    X'0414'             E20                         02206001
                                   2254 *                                                              02207001
001426 950C C000      00000        2255 FORBB    CLI   0(R12),X'0C'        PROC IN STACK ?             02208001
00142A 4770 8442            01442  2256          BNE   NOPROCBY            NO                          02209001
00142E 9214 C000      00000        2257          MVI   0(R12),X'14'        MAKE PROC BE PROC**         02210001
001432 94BF DD8E      00D8E        2258          NI    BITS1,X'BF'         PROBIT=0                    02211001
001436 9500 DD8D      00D8D        2259          CLI   PZ,0                ALL PARAMETERS SPECIFIED ?  02212001
00143A 4780 8442            01442  2260          BE    NOPROCBY            YES                         02213001
00143E 45C0 57CE            007CE  2261          BAL   R12,ERROR10         NO, GENERATE E10            02214001
001442 58C0 DCD8            00CD8  2262 NOPROCBY L     R12,SP                                          02215001
001446 41C0 C001            00001  2263          LA    R12,1(,R12)         INCR STACK POINTER          02216001
00144A 9218 C000      00000        2264          MVI   0(R12),XFFOR        PUT FOR INTO STACK          02217001
00144E 50C0 DCD8            00CD8  2265          ST    R12,SP                                          02218001
001452 48C0 DD4C            00D4C  2266          LH    R12,IGC                                         02219001
001456 1ACC                        2267          AR    R12,R12                                         02220001
001458 4AC0 DD4C            00D4C  2268          AH    R12,IGC                                         02221001
00145C 5AC0 DD50            00D50  2269          A     R12,AGT                                         02222001
001460 58F0 DD6C            00D6C  2270          L     R15,LIGP                                        02223001
001464 D201 C000 F008 00000 00008  2271          MVC   0(2,R12),8(R15)     ENTRY INTO GROUP TABLE      02224001
00146A 422C 0002            00002  2272          STC   R2,2(R12)                                       02225001
00146E 947F C000      00000        2273          NI    0(R12),X'7F'        CLEAR POSSIBLE PHI IND      02226001
001472 58F0 DD68            00D68  2274          L     R15,AITL                                        02227001
001476 D203 F000 DD6C 00000 00D6C  2275          MVC   0(4,R15),LIGP       CONSTRUCT FOR HEAD ENTRY IN ITAB 02228001
00147C 922B F005      00005        2276          MVI   5(R15),X'2B'                                    02229001
001480 D201 F008 DD4C 00008 00D4C  2277          MVC   8(2,R15),IGC                                    02230001
001486 50F0 DD6C            00D6C  2278          ST    R15,LIGP            UPDATE LIGP                 02231001
00148A 45C0 595A            0095A  2279          BAL   R12,ITABCLEA        CHECK AND CLEAR NEXT ITAB ENTRY 02232001
00148E 4110 1001            00001  2280          LA    R1,1(,R1)                                       02233001
001492 47F0 5174            00174  2281          B     TESTLOOP                                        02234001
                                   2282 *                                                              02235001
                                   2283 *        TYPE                                                  02236001
                                   2284 *                                                              02237001
                                   2285 *        ENTRED FOR INTEGER, REAL AND BOOLEAN.                 02238001
                                   2286 *        TESTS FOR NEWBLOCK, BEGBIT, AND IF IDENTIFIER IS      02239001
                                   2287 *        SPECIFIED, PROBIT.                                    02240001
                                   2288 *        MOVES INTERNAL NAME CHARACTERISTICS AND PBN TO ITAB.  02241001
                                   2289 *        CHECKS THE IDENTIFIER FOR VALIDITY AND MOVES UP TO 6  02242001
                                   2290 *        CHARACTERS TO ITAB EXTERNAL NAME.                     02243001
                                   2291 *        IF THE FIRST CHARACTER FOUND IS AN APOSTROPHE THE CHECK 02244001
                                   2292 *        IS VIA APOSTROF, DELIMITER AND TYPESPEC FOR ARRAY OR  02245001
                                   2293 *        PROCEDURE (FBYTE=F0)                                  02246001
                                   2294 *                                                              02247001
001496 9140 DD8E      00D8E        2295 TYPE     TM    BITS1,X'40'         PROBIT = 1 ?                02248001
00149A 4710 86A4            016A4  2296          BO    SPECENT             YES                         02249001
00149E 9180 DD8E      00D8E        2297          TM    BITS1,X'80'         BEGBIT = 1 ?                02250001
0014A2 4780 84B2            014B2  2298          BZ    TYPEAA                                          02251001
0014A6 5090 BDC8            02DC8  2299          ST    R9,SAVE1            IF YES GOTO BEGI PGM        02252001
0014AA 4590 5DCC            00DCC  2300          BAL   R9,BEG1                                         02253001
0014AE 5890 BDC8            02DC8  2301          L     R9,SAVE1                                        02254001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12

0014B2 58F0 DD68              00D68  2302 TYPEAA   L     R15,AITL             MOVE CHARACTERISTICS TO ITAB     02255001
0014B6 92C0 F006        00006        2303          MVI   6(R15),X'C0'         TO THE 7TH AND 8TH               02256001
0014BA 9230 F007        00007        2304          MVI   7(R15),X'30'         BYTE OF THE ENTRY                02257001
0014BE 416E 9002              00002  2305          LA    R6,2(R14,R9)         MODIFIY THE LAST 4 BITS WITH     02258001
0014C2 D100 F007 6000 00007 00000    2306          MVN   7(1,R15),0(R6)       INFORMATION FROM THE KEYWTAB     02259001
0014C8 5860 DD70              00D70  2307          L     R6,LPBP                                               02260001
0014CC D200 F008 600A 00008 0000A    2308          MVC   8(1,R15),10(R6)      MOVE IN PROGRAM BLOCK NUMBER     02261001
0014D2 4110 1001              00001  2309 TYPEDAFI LA    R1,1(,R1)            GET NEXT CHARACTER               02262001
0014D6 9540 1000        00000        2310          CLI   0(R1),XFA            CHAR A LETTER ?                  02263001
0014DA 47B0 850E              0150E  2311          BNL   TYPENAME             YES                              02264001
0014DE 952B 1000        00000        2312          CLI   0(R1),XFBLANK        BLANK ?                          02265001
0014E2 4780 84D2              014D2  2313          BE    TYPEDAFI                                              02266001
0014E6 952F 1000        00000        2314          CLI   0(R1),XFZETA         ZETA ?                           02267001
0014EA 4770 84F6              014F6  2315          BNE   TYPEBB                                                02268001
0014EE 4190 84D6              014D6  2316          LA    R9,TYPEDAFI+4        CHANGE INPUT                     02269001
0014F2 47F0 5A28              00A28  2317          B     CIB                  BUFFER                           02270001
                                     2318 *                                                                    02271001
0014F6 952E 1000        00000        2319 TYPEBB   CLI   0(R1),XFQUOTE        QUOTE ?                          02272001
0014FA 4780 8506              01506  2320          BE    TYPECC                                                02273001
0014FE 41F0 84D2              014D2  2321          LA    R15,TYPEDAFI         STORE RETURN ADDR                02274001
001502 47F0 8588              01588  2322          B     IERSPEC              GOTO ERROR ROUTINE               02275001
                                     2323 *                                                                    02276001
001506 92F0 DD81        00D81        2324 TYPECC   MVI   FBYTE,X'F0'          MOVE F0 TO FBYTE                 02277001
00150A 47F0 5304              00304  2325          B     ENTRAPR              CHECK FOR TYPE ARRAY OR PROC     02278001
                                     2326 *                                                                    02279001
00150E 5870 DD68              00D68  2327 TYPENAME L     R7,AITL              GET ITAB POINTER                 02280001
001512 D200 7000 1000 00000 00000    2328          MVC   0(1,R7),0(R1)        MOVE FIRST CHAR TO ITAB          02281001
001518 4170 7001              00001  2329          LA    R7,1(,R7)            INCREASE POINTER                 02282001
00151C 4120 0001              00001  2330          LA    R2,1                 INITIALIZE COUNTER               02283001
001520 4190 8528              01528  2331          LA    R9,TYPENM03          RTN IF CHANGE OF I/P BUF NEEDED  02284001
001524 4110 1001              00001  2332 TYPENM02 LA    R1,1(,R1)            GET NEXT CHAR                    02285001
001528 952F 1000        00000        2333 TYPENM03 CLI   0(R1),XFZETA         LETTER, ZETA OR SOMETHING ELSE ? 02286001
00152C 4780 5A28              00A28  2334          BE    CIB                  CHANGE I/P BUFFER                02287001
001530 4740 854E              0154E  2335          BL    TLISTSE              CHECK FURTHER                    02288001
001534 5920 BD24              02D24  2336          C     R2,KF6               6 CHAR ALREADY MOVED IN ?        02289001
001538 4780 8524              01524  2337          BE    TYPENM02             YES                              02290001
00153C D200 7000 1000 00000 00000    2338          MVC   0(1,R7),0(R1)        NO, MOVE IN NEXT CHAR            02291001
001542 4170 7001              00001  2339          LA    R7,1(,R7)            INCREASE                         02292001
001546 4120 2001              00001  2340          LA    R2,1(,R2)            POINTERS                         02293001
00154A 47F0 8524              01524  2341          B     TYPENM02             TAKE NEXT CHAR                   02294001
                                     2342 *                                                                    02295001
00154E 952B 1000        00000        2343 TLISTSE  CLI   0(R1),XFBLANK        BLANK ?                          02296001
001552 4780 8524              01524  2344          BE    TYPENM02                                              02297001
001556 9525 1000        00000        2345          CLI   0(R1),XFCOMMA        COMMA ?                          02298001
00155A 4780 8576              01576  2346          BE    TYPECOMA                                              02299001
00155E 41F0 84D2              014D2  2347          LA    R15,TYPEDAFI         RETURN ADDR FOR IER              02300001
001562 4160 8592              01592  2348          LA    R6,IER               RETURN ADDR IF NO SEMICOLON      02301001
001566 45C0 5912              00912  2349          BAL   R12,FINDSEMC         LOOK FOR SEMICOLON               02302001
                                     2350 *                                                                    02303001
                                     2351 *        TYPESEMC                                                    02304001
                                     2352 *                                                                    02305001
                                     2353 *        SEMICOLON FOUND                                             02306001
                                     2354 *        END OF THIS DECLARATION                                     02307001
                                     2355 *        DELTABIT IS TURNED ON AND THE RETURN TO TEST IS VIA         02308001
                                     2356 *        SEMCO                                                       02309001
                                     2357 *                                                                    02310001
00156A 45C0 595A              0095A  2358 TYPESEMC BAL   R12,ITABCLEA         CLEAR NEXT ITAB ENTRY            02311001
00156E 9620 DD8E        00D8E        2359          OI    BITS1,X'20'          SET DELTABIT TO ONE              02312001
001572 47F0 55D4              005D4  2360          B     SEMCO                GO TO SEMICOLON PROGRAM          02313001
                                     2361 *                                                                    02314001
                                     2362 *        TYPECOMA                                                    02315001
                                     2363 *                                                                    02316001
                                     2364 *        AN COMMA ENDED THE IDENTIFIER                               02317001
                                     2365 *        THE INTERNAL NAME IS COPIED AND TYPE PROGRAM UTILIZED       02318001
                                     2366 *        AGAIN                                                       02319001
                                     2367 *                                                                    02320001
001576 5890 DD68              00D68  2368 TYPECOMA L     R9,AITL                                               02321001
00157A 45C0 595A              0095A  2369          BAL   R12,ITABCLEA         CHECK AND CLEAR NEXT ITABENTRY   02322001
00157E D202 F006 9006 00006 00006    2370          MVC   6(3,R15),6(R9)       COPY ID AND PBN FIELDS           02323001
001584 47F0 84D2              014D2  2371          B     TYPEDAFI             RETURN TO CHECK NEXT IDENTIFIER  02324001
                                     2372 *                                                                    02325001
                                     2373 *        IER                                                         02326001
                                     2374 *                                                                    02327001
                                     2375 *        IDENTIFIER ERROR ROUTINE                                    02328001
                                     2376 *                                                                    02329001
                                     2377 *        HAS 2 ENTRIES -                                             02330001
                                     2378 *        1. IERSPEC IF FIRST CHARACTER IS IN ERROR, E5               02331001
                                     2379 *        2. IER ANY OTHER CHARACTER, E16                             02332001
                                     2380 *        RETURN -                                                    02333001
                                     2381 *        1. VIA R15 IF AN COMMA IS FOUND AFTER                       02334001
                                     2382 *           THE IDENTIFIER IN ERROR.                                 02335001
                                     2383 *        2. TO TEST VIA SEMCO IF AN SEMICOLON IS FOUND.              02336001
                                     2384 *        3. TO PROCFIN IF AN RIGHT PARENTHESIS IS FOUND AND THE      02337001
                                     2385 *        FMBIT IS ON WHICH INDICATES THAT THE FORMAL PARAMETER       02338001
                                     2386 *        LIST OF A PROCEDURE IS UNDER PROCESS                        02339001
                                     2387 *                                                                    02340001
                                     2388 *        R15 MIGHT LEAD TO TYPEDAFI, IDCHECK, PROCID                 02341001
                                     2389 *                                                                    02342001
001588 4560 578A              0078A  2390 IERSPEC  BAL   R6,ERR7                                               02343001
                                     2391 *                                                                    02344001
00158C 0405                          2392          DC    X'0405'              E5                               02345001
                                     2393 *                                                                    02346001
00158E 47F0 8598              01598  2394          B     IERSPECA                                              02347001
                                     2395 *                                                                    02348001
001592 4560 56CC              006CC  2396 IER      BAL   R6,ERR2                                               02349001
                                     2397 *                                                                    02350001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

001596 0010                        2398          DC    X'0010'                  E16                             02351001
                                   2399 *                                                                       02352001
001598 5870 DD68            00D68  2400 IERSPECA L     R7,AITL                  RESET R7 TO START               02353001
00159C 9200 7000      00000        2401          MVI   0(R7),0                  CLEAR EXTERNAL NAME PART        02354001
0015A0 D204 7001 7000 00001 00000  2402          MVC   1(5,R7),0(R7)                                            02355001
0015A6 4110 1001            00001  2403 IERCOMMA LA    R1,1(,R1)                                                02356001
0015AA 4160 85D4            015D4  2404          LA    R6,IERSELSE              RETURN IF NO SEMICOLON FOUND    02357001
0015AE 45C0 5912            00912  2405          BAL   R12,FINDSEMC             LOOK FOR SEMICOLON              02358001
0015B2 58F0 DD68            00D68  2406 IERSEMCO L     R15,AITL                 SEMICOLON FOUND - END OF DCL.   02359001
0015B6 45C0 5962            00962  2407          BAL   R12,ITABCLEC             CLEAR ITAB ENTRY                02360001
0015BA 9140 DD90      00D90        2408          TM    BITS3,FMBIT              FORMAL PARAMETER LIST PROCESSED? 02361001
0015BE 4710 B1DE            021DE  2409          BO    SCYES3-8                 YES, RETURN TO PROCEDURE END    02362001
0015C2 9620 DD8E      00D8E        2410          OI    BITS1,X'20'              DELTABIT = 1                    02363001
0015C6 94EF DD8F      00D8F        2411          NI    BITS2,X'EF'              VALBIT=0                        02364001
0015CA D201 DCB8 BD0C 00CB8 02D0C  2412          MVC   KB(2),KF0                CKB = 00                        02365001
0015D0 47F0 55D4            005D4  2413          B     SEMCO                    RETURN TO TEST VIA SEMCO        02366001
                                   2414 *                                                                       02367001
0015D4 9525 1000      00000        2415 IERSELSE CLI   0(R1),XFCOMMA            COMMA ?                         02368001
0015D8 078F                        2416          BER   R15                      RETURN IF COMMA FOUND           02369001
0015DA 9140 DD90      00D90        2417          TM    BITS3,FMBIT              FORMAL PARAMETER LIST PROCESSED? 02370001
0015DE 4780 85A6            015A6  2418          BZ    IERCOMMA                 NO                              02371001
0015E2 9526 1000      00000        2419          CLI   0(R1),XFRBRAC            RIGHT BRACKET ?                 02372001
0015E6 4780 B1D2            021D2  2420          BE    PROCFIN                  YES, GOTO PROCEDURE END HANDLING 02373001
0015EA 47F0 85A6            015A6  2421          B     IERCOMMA                 CONTINUE CHECKING NEXT CHAR     02374001
                                   2422 *                                                                       02375001
                                   2423 *        CODE                                                           02376001
                                   2424 *                                                                       02377001
                                   2425 *        SETS THE PROBIT TO ZERO                                        02378001
                                   2426 *        CHECKS THAT CODE IS IN THE CORRECT PLACE AND IS                02379001
                                   2427 *        FOLLOWED BY A SEMICOLON                                        02380001
                                   2428 *        CORRECTS THE INTERNAL NAME OF THE PROCEDURE                    02381001
                                   2429 *        TRANSFER THE NAME IN EXTERNAL FORM TO OUTPUT                   02382001
                                   2430 *        RETURNS VIA PROGRAM BLOCK END TO TEST                          02383001
                                   2431 *                                                                       02384001
0015EE 94BF DD8E      00D8E        2432 CODE     NI    BITS1,X'BF'              PROBIT=0                        02385001
0015F2 9500 DD8D      00D8D        2433          CLI   PZ,0                     ALL PARAMETERS SPECIFIED ?      02386001
0015F6 4780 85FE            015FE  2434          BZ    CODEAA                   YES                             02387001
0015FA 45C0 57CE            007CE  2435          BAL   R12,ERROR10              NO, GENERATE E10                02388001
0015FE 58F0 DCD8            00CD8  2436 CODEAA   L     R15,SP                                                   02389001
001602 950C F000      00000        2437          CLI   0(R15),X'0C'             PROC IN STACK ?                 02390001
001606 4770 8688            01688  2438          BNE   CODERR                   IF NO BRANCH TO ERROR           02391001
00160A 18E3                        2439          LR    R14,R3                                                   02392001
00160C 5BE0 BD18            02D18  2440          S     R14,KF3                                                  02393001
001610 9529 E000      00000        2441          CLI   0(R14),XFDELTA           DELTA IN O/P ?                  02394001
001614 4770 8688            01688  2442          BNE   CODERR                   IF NO  BRANCH TO ERROR          02395001
001618 58F0 DD70            00D70  2443          L     R15,LPBP                                                 02396001
00161C 5BF0 BD38            02D38  2444          S     R15,KF11                 GET PROCEDURE NAME              02397001
001620 9780 F007      00007        2445          XI    7(R15),X'80'             INTERNAL NAME IS CORRECTED      02398001
001624 9180 F013      00013        2446          TM    19(R15),X'80'            TYPE PROCEDURE ?                02399001
001628 4780 8630            01630  2447          BZ    CODEBB                                                   02400001
00162C 9780 F01D      0001D        2448          XI    29(R15),X'80'            YES, CORRECT SECOND NAME ENTRY  02401001
001630 4100 3009            00009  2449 CODEBB   LA    R0,9(,R3)                                                02402001
001634 45C0 5982            00982  2450          BAL   R12,COBSPEC              CHECK IF ENOUGH SPACE IN O/P    02403001
001638 923C 3000      00000        2451          MVI   0(R3),X'3C'              TRANSFER GAMMA                  02404001
00163C D205 3001 F000 00001 00000  2452          MVC   1(6,R3),0(R15)           TRANSFER NAME AND               02405001
001642 DC05 3001 B92E 00001 0292E  2453          TR    1(6,R3),TRINTEXT         CONVERT TO EXTERNAL CODE        02406001
001648 9240 3007      00007        2454          MVI   7(R3),C' '               MOVE IN EXTERNAL BLANK          02407001
00164C 9240 3008      00008        2455          MVI   8(R3),C' '               MOVE IN EXTERNAL BLANK          02408001
001650 4130 3009            00009  2456          LA    R3,9(,R3)                                                02409001
001654 9620 DD8E      00D8E        2457          OI    BITS1,X'20'              DELTABIT = 1                    02410001
001658 4160 866C            0166C  2458 SEARCH   LA    R6,NOSEMC                RETURN IF NO SEMICOLON FOUND    02411001
00165C 4140 55D4            005D4  2459          LA    R4,SEMCO                 RETURN ADDR FOR PBLCKEND        02412001
001660 4110 1001            00001  2460          LA    R1,1(,R1)                                                02413001
001664 45C0 5912            00912  2461          BAL   R12,FINDSEMC             SEMICOLON FOLLOWS ?             02414001
001668 47F0 5FB8            00FB8  2462          B     PBLCKEND                 SEMICOLON FOUND, GOTO PBLCKEND  02415001
                                   2463 *                                                                       02416001
00166C 4560 578A            0078A  2464 NOSEMC   BAL   R6,ERR7                                                  02417001
                                   2465 *                                                                       02418001
001670 040F                        2466          DC    X'040F'                  E15                             02419001
                                   2467 *                                                                       02420001
001672 4160 5912            00912  2468          LA    R6,FINDSEMC              PERIOD FOUND ?                  02421001
001676 1969                        2469          CR    R6,R9                                                    02422001
001678 4780 5FB8            00FB8  2470          BE    PBLCKEND                 NO                              02423001
00167C 0610                        2471          BCTR  R1,0                     YES                             02424001
00167E 922D 1000      00000        2472          MVI   0(R1),XFPERIOD           MOVE IN A PERIOD                02425001
001682 0610                        2473          BCTR  R1,0                     DECREASE R1, WILL BE INCREASED  02426001
001684 47F0 5FB8            00FB8  2474          B     PBLCKEND                 BY SEMCO. RETURN VIA PBLCKEND   02427001
                                   2475 *                                                                       02428001
001688 4560 578A            0078A  2476 CODERR   BAL   R6,ERR7                                                  02429001
                                   2477 *                                                                       02430001
00168C 0418                        2478          DC    X'0418'                  E24                             02431001
                                   2479 *                                                                       02432001
00168E 47F0 8324            01324  2480          B     COMERR                   SKIP TO NEXT SEMICOLON          02433001
                                   2481 *                                                                       02434001
                                   2482 *        SPEC                                                           02435001
                                   2483 *                                                                       02436001
                                   2484 *        ENTERED FOR LABEL AND STRING                                   02437001
                                   2485 *        CHECKS THAT THEY ARE IN PROCEDURE HEAD                         02438001
                                   2486 *                                                                       02439001
001692 9140 DD8E      00D8E        2487 SPEC     TM    BITS1,X'40'              PROBIT ON ?                     02440001
001696 4710 86A4            016A4  2488          BO    SPECENT                  YES, PROCESS SPECIFIED          02441001
                                   2489 *                                       LABEL OR STRING                 02442001
00169A 4560 578A            0078A  2490          BAL   R6,ERR7                                                  02443001
                                   2491 *                                                                       02444001
00169E 0419                        2492          DC    X'0419'                  E25                             02445001
                                   2493 *                                                                       02446001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

0016A0 47F0 8324            01324  2494          B     COMERR                 SKIP TO NEXT SEMICOLON            02447001
                                   2495 *                                                                       02448001
                                   2496 *        SPECENT                                                        02449001
                                   2497 *                                                                       02450001
                                   2498 *        ENTERED FOR SPECIFICATIONS FROM -                              02451001
                                   2499 *        TYPE                                                           02452001
                                   2500 *        SPEC                                                           02453001
                                   2501 *        ARRAY                                                          02454001
                                   2502 *        SWITCH                                                         02455001
                                   2503 *        PROCEDURE                                                      02456001
                                   2504 *        SAVES IN KB THE CHARACTERISTICS TAKEN FROM THE                 02457001
                                   2505 *        DELIMITER TABLE                                                02458001
                                   2506 *                                                                       02459001
0016A4 41FE 9001            00001  2507 SPECENT  LA    R15,1(R14,R9)          MOVE IN IDFIELD                   02460001
0016A8 D201 DCB8 F000 00CB8 00000  2508          MVC   KB(2),0(R15)                                             02461001
                                   2509 *                                                                       02462001
                                   2510 *        IDCHECK                                                        02463001
                                   2511 *                                                                       02464001
                                   2512 *        ENTERED FROM -                                                 02465001
                                   2513 *        VALUE                                                          02466001
                                   2514 *        TYPEARRAY                                                      02467001
                                   2515 *        TYPEPROCEDURE                                                  02468001
                                   2516 *        SPECENT                                                        02469001
                                   2517 *        CHECKS THE NAME FOR FORMAL PARAMETERS                          02470001
                                   2518 *        FINDS THE ENTRY IN ITAB AND INSERTS THERE THE                  02471001
                                   2519 *        CHARACTERISTICS AND PROGRAM BLOCK NUMBER.                      02472001
                                   2520 *        DECREASES THE PARAMETER COUNT PZ BY ONE FOR EACH               02473001
                                   2521 *        CORRECT PARAMETER FOUND .                                      02474001
                                   2522 *        IF A COMMA ENDS THE IDENTIFIER IDCHECK WILL BE                 02475001
                                   2523 *        ACTIVATED AGAIN.                                               02476001
                                   2524 *        IF A SEMICOLON ENDS THE DELIMITER THE RETURN IS TO TEST        02477001
                                   2525 *        VIA SEMICOLON PROGRAM                                          02478001
                                   2526 *                                                                       02479001
0016AE 4110 1001            00001  2527 IDCHECK  LA    R1,1(,R1)              GET NEXT CHAR                     02480001
0016B2 9539 1000      00000        2528          CLI   0(R1),XF9              LETTER ?                          02481001
0016B6 47D0 8700            01700  2529          BNH   IDNOLETR               NO                                02482001
0016BA D205 873E BD0C 0173E 02D0C  2530          MVC   IDBUCKET(6),KF0        CLEAR BUCKET WITH ZEROS           02483001
0016C0 4170 873E            0173E  2531          LA    R7,IDBUCKET                                              02484001
0016C4 41E0 0001            00001  2532          LA    R14,1                                                    02485001
0016C8 D200 7000 1000 00000 00000  2533          MVC   0(1,R7),0(R1)          MOVE FIRST CHAR TO BUCKET         02486001
0016CE 4170 7001            00001  2534          LA    R7,1(,R7)                                                02487001
0016D2 4190 86DA            016DA  2535          LA    R9,IDLOOPAA            RETURN IF CIB NEEDED              02488001
0016D6 4110 1001            00001  2536 IDLOOP   LA    R1,1(,R1)              GET NEXT CHAR                     02489001
0016DA 952F 1000      00000        2537 IDLOOPAA CLI   0(R1),XFZETA           ZETA ?                            02490001
0016DE 4780 5A28            00A28  2538          BE    CIB                    YES                               02491001
0016E2 4740 8744            01744  2539          BL    IDSEARCH               SOMETHING ELSE                    02492001
0016E6 59E0 BD24            02D24  2540          C     R14,KF6                LETTER OR DIGIT                   02493001
0016EA 4780 86D6            016D6  2541          BE    IDLOOP                 6 CHAR MOVED ALREADY YES ?        02494001
0016EE D200 7000 1000 00000 00000  2542          MVC   0(1,R7),0(R1)          NO, MOVE CHAR                     02495001
0016F4 4170 7001            00001  2543          LA    R7,1(,R7)              INCREASE POINTERS                 02496001
0016F8 41E0 E001            00001  2544          LA    R14,1(,R14)                                              02497001
0016FC 47F0 86D6            016D6  2545          B     IDLOOP                 TAKE NEXT CHAR                    02498001
                                   2546 *                                 FIRST CHAR WAS NOT LETTER         02499001
001700 952B 1000      00000        2547 IDNOLETR CLI   0(R1),XFBLANK          BLANK ?                           02500001
001704 4780 86AE            016AE  2548          BE    IDCHECK                YES, GET NEXT CHAR                02501001
001708 952F 1000      00000        2549          CLI   0(R1),XFZETA           ZETA ?                            02502001
00170C 4770 8718            01718  2550          BNE   IDNOLETA               NO                                02503001
001710 4190 86B2            016B2  2551          LA    R9,IDCHECK+4           YES, CHANGE I/P-BUFFER            02504001
001714 47F0 5A28            00A28  2552          B     CIB                    BUFFER                            02505001
                                   2553 *                                                                       02506001
001718 952E 1000      00000        2554 IDNOLETA CLI   0(R1),XFQUOTE          QUOTE ?                           02507001
00171C 4780 8728            01728  2555          BE    IDNOLETB               YES                               02508001
001720 41F0 86AE            016AE  2556          LA    R15,IDCHECK            NO, SET RETURN ADD AND GOTO       02509001
001724 47F0 8588            01588  2557          B     IERSPEC                IDENTIFIER ERROR ROUTINE          02510001
                                   2558 *                                                                       02511001
001728 92F0 DD81      00D81        2559 IDNOLETB MVI   FBYTE,X'F0'            SET FBYTE, LOOK FOR TYPE          02512001
00172C 47F0 5304            00304  2560          B     ENTRAPR                ARRAY OR TYPE PROC                02513001
                                   2561 *                                                                       02514001
001730 4560 56EE            006EE  2562 IDSELSE  BAL   R6,ERR2E                                                 02515001
                                   2563 *                                                                       02516001
001734 0010                        2564          DC    X'0010'                E16                               02517001
                                   2565 *                                                                       02518001
001736 41F0 86AE            016AE  2566          LA    R15,IDCHECK            RETURN ADDR FOR IER               02519001
00173A 47F0 85A6            015A6  2567          B     IERCOMMA               GOTO IDENTIFIER ERROR ROUTINE     02520001
                                   2568 *                                                                       02521001
00173E 000000000000                2569 IDBUCKET DC    6X'00'                                                   02522001
                                   2570 *                                                                       02523001
001744 952B 1000      00000        2571 IDSEARCH CLI   0(R1),XFBLANK          BLANK ?                           02524001
001748 4780 86D6            016D6  2572          BE    IDLOOP                 YES, BRANCH                       02525001
00174C 9525 1000      00000        2573          CLI   0(R1),XFCOMMA          COMMA ?                           02526001
001750 4780 8760            01760  2574          BE    IDCOMMA                YES, BRANCH                       02527001
001754 4160 8730            01730  2575          LA    R6,IDSELSE             IF NOT SEMICOLON FOUND            02528001
001758 45C0 5912            00912  2576          BAL   R12,FINDSEMC           LOOK FOR SEMICOLON                02529001
00175C 9620 DD8E      00D8E        2577          OI    BITS1,X'20'            SEMICOLON FOUND SET DELTABIT      02530001
001760 D503 DD60 BD0C 00D60 02D0C  2578 IDCOMMA  CLC   PRIMPAR(4),KF0         ARE THERE ANY PARAMETERS ?        02531001
001766 4780 8784            01784  2579          BE    NOTFOUND               NO                                02532001
00176A 58C0 DD60            00D60  2580          L     R12,PRIMPAR            GET FIRST PARAMETER               02533001
                                   2581 *                                                                       02534001
                                   2582 *        COMPID                                                         02535001
                                   2583 *                                                                       02536001
                                   2584 *        A LOOP TO FIND THE PARAMETER IN ITAB                           02537001
                                   2585 *                                                                       02538001
00176E D505 873E C000 0173E 00000  2586 COMPID   CLC   IDBUCKET(6),0(R12)     CHECK IF IDENTIFIER FOUND         02539001
001774 4780 878E            0178E  2587          BE    IDVALCHK               FOUND                             02540001
001778 41C0 C00B            0000B  2588          LA    R12,11(,R12)           NOT FOUND. TRY NEXT PARAMETER     02541001
00177C 59C0 DD68            00D68  2589          C     R12,AITL               IF THERE ARE ANY LEFT             02542001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

001780 4770 876E             0176E  2590          BNE   COMPID                 YES                      02543001
001784 4560 56EE             006EE  2591 NOTFOUND BAL   R6,ERR2E                                        02544001
                                    2592 *                                                              02545001
001788 001B                         2593          DC    X'001B'                E27                      02546001
                                    2594 *                                                              02547001
00178A 47F0 87CE             017CE  2595          B     IDENDER                                         02548001
                                    2596 *                                                              02549001
00178E 9110 DD8F       00D8F        2597 IDVALCHK TM    BITS2,X'10'            VALUE CALL ?             02550001
001792 4710 87FE             017FE  2598          BO    VALDLB2                YES, GOTO VAL ROUTINE    02551001
001796 9106 C006       00006        2599          TM    6(R12),X'06'           SPECIAL USE BITS ON ?    02552001
00179A 4780 87A8             017A8  2600          BZ    IDCHKEND               NO                       02553001
00179E 4560 56EE             006EE  2601          BAL   R6,ERR2E               YES, CREATE              02554001
                                    2602 *                                                              02555001
0017A2 001A                         2603          DC    X'001A'                E26                      02556001
                                    2604 *                                                              02557001
0017A4 47F0 87CE             017CE  2605          B     IDENDER                GET NEXT IDENTIFIER      02558001
                                    2606 *                                                              02559001
                                    2607 *        IDCHKEND                                              02560001
                                    2608 *                                                              02561001
                                    2609 *        INSERTS CHARACTERISTICS AND PBN, DECRESES PZ.         02562001
                                    2610 *        IF BOTH VALUE AND NAME BIT ON BYTE 7 EQVALS 30 A VALUE 02563001
                                    2611 *        SPECIFICATION HAS BEEN MADE EARLIER SO IT IS CORRECTED 02564001
                                    2612 *        TO BE A CALL BY VALUE.                                02565001
                                    2613 *                                                              02566001
0017A8 5860 DD70             00D70  2614 IDCHKEND L     R6,LPBP                                         02567001
0017AC D200 C008 600A 00008 0000A   2615          MVC   8(1,R12),10(R6)        INSERT PBN               02568001
0017B2 D601 C006 DCB8 00006 00CB8   2616          OC    6(2,R12),KB                                     02569001
0017B8 4360 DD8D             00D8D  2617          IC    R6,PZ                  CORRECT IDFIELD IS CREATED 02570001
0017BC 0660                         2618          BCTR  R6,0                   PZ = PZ-1                02571001
0017BE 4260 DD8D             00D8D  2619          STC   R6,PZ                                           02572001
0017C2 9130 C007       00007        2620          TM    7(R12),X'30'           VALUE BIT ON ?           02573001
0017C6 4740 87CE             017CE  2621          BM    IDENDER                                         02574001
0017CA 94EF C007       00007        2622 VALCALL  NI    7(R12),X'EF'           YES, ZERO NAME BIT       02575001
0017CE 9120 DD8E       00D8E        2623 IDENDER  TM    BITS1,X'20'            DELTABIT ON ?            02576001
0017D2 4780 86AE             016AE  2624          BZ    IDCHECK                NO, GET NEXT IDENT       02577001
0017D6 D201 DCB8 BD0C 00CB8 02D0C   2625          MVC   KB(2),KF0              YES, CLEAR IDFIELD       02578001
0017DC 94EF DD8F       00D8F        2626          NI    BITS2,X'EF'            SET VALBIT TO ZERO       02579001
0017E0 47F0 55D4             005D4  2627          B     SEMCO                  GOTO SEMICOLON PROGRAM   02580001
                                    2628 *                                                              02581001
                                    2629 *        VALUE                                                 02582001
                                    2630 *                                                              02583001
                                    2631 *        CHECKS THAT SPECIFICATION IS IN A PROCEDURE HEAD      02584001
                                    2632 *        EXITS FIRST TO IDCHECK TO FIND THE PARAMETER WILL THEN 02585001
                                    2633 *        RETURN TO VALDLB2 FOR FUTHER CHECKS AND TO INSERT THE 02586001
                                    2634 *        VALUE BIT IN THE INTERNAL NAME                        02587001
                                    2635 *                                                              02588001
0017E4 9140 DD8E       00D8E        2636 VALUE    TM    BITS1,X'40'            PROCEDURE ?              02589001
0017E8 4780 87F4             017F4  2637          BZ    VALUERR                NO, ERROR                02590001
0017EC 9610 DD8F       00D8F        2638          OI    BITS2,X'10'            YES, SET VALUE BIT TO ONE 02591001
0017F0 47F0 86AE             016AE  2639          B     IDCHECK                AND GO TO IDCHEK         02592001
                                    2640 *                                                              02593001
0017F4 4560 578A             0078A  2641 VALUERR  BAL   R6,ERR7                E28 VALVE                02594001
                                    2642 *                                                              02595001
0017F8 041C                         2643          DC    X'041C'                OUTSIDE PROC             02596001
                                    2644 *                                                              02597001
0017FA 47F0 8324             01324  2645          B     COMERR                 SKIP TO NEXT SEMICOLON   02598001
                                    2646 *                                                              02599001
0017FE 9120 C007       00007        2647 VALDLB2  TM    7(R12),X'20'           VALUE BIT ON IN IDENTIFIER ? 02600001
001802 4780 8810             01810  2648          BZ    VALDLB3                NO                       02601001
001806 4560 56EE             006EE  2649          BAL   R6,ERR2E                                        02602001
                                    2650 *                                                              02603001
00180A 001E                         2651          DC    X'001E'                E30                      02604001
                                    2652 *                                                              02605001
00180C 47F0 87CE             017CE  2653          B     IDENDER                GET NEXT IDENTIFIER      02606001
                                    2654 *                                                              02607001
001810 9106 C006       00006        2655 VALDLB3  TM    6(R12),X'06'           SPECIAL USE BIT ENTERED ? 02608001
001814 4780 8826             01826  2656          BZ    VALDLB4                NO                       02609001
001818 4560 578A             0078A  2657          BAL   R6,ERR7                                         02610001
                                    2658 *                                                              02611001
00181C 041D                         2659          DC    X'041D'                E29                      02612001
                                    2660 *                                                              02613001
00181E 9730 C007       00007        2661          XI    7(R12),X'30'           MOVE IN IDFIELD          02614001
001822 47F0 87CE             017CE  2662          B     IDENDER                GET NEXT IDENTIFIER      02615001
                                    2663 *                                                              02616001
001826 9230 C007       00007        2664 VALDLB4  MVI   7(R12),X'30'           CORRECT - MOVE IN IDFIELD 02617001
00182A 47F0 87CE             017CE  2665          B     IDENDER                GET NEXT IDENTIFIER      02618001
                                    2666 *                                                              02619001
                                    2667 *        TYPEARRAY                                             02620001
                                    2668 *                                                              02621001
                                    2669 *        ENTERED FROM TYPESPEC                                 02622001
                                    2670 *        TEST FOR PROBIT, BEGBIT                               02623001
                                    2671 *        INSERTS CHARACTERISTICS IN INTERNAL NAME WITHOUT      02624001
                                    2672 *        DESTROYING THE TYPE SPECIFICATIONS ENTERED BY THE TYPE 02625001
                                    2673 *        PROGRAM                                               02626001
                                    2674 *        JOINS ARRAY PROGRAM FOR A SPECIFIED TYPEARRAY THE EXIT 02627001
                                    2675 *        IS TO IDCHECK                                         02628001
                                    2676 *                                                              02629001
00182E 9140 DD8E       00D8E        2677 TYPEARRY TM    BITS1,X'40'            PROBIT ON ?              02630001
001832 4710 885A             0185A  2678          BO    TARYDHB3               YES, SPECIFICATION       02631001
001836 9180 DD8E       00D8E        2679          TM    BITS1,X'80'            BEGBIT ON ?              02632001
00183A 4780 884A             0184A  2680          BZ    TYPEARAA                                        02633001
00183E 5090 BDC8             02DC8  2681          ST    R9,SAVE1               YES                      02634001
001842 4590 5DCC             00DCC  2682          BAL   R9,BEG1                GO AND PROCESS PROGRAMBLOCK HEAD 02635001
001846 5890 BDC8             02DC8  2683          L     R9,SAVE1                                        02636001
00184A 5870 DD68             00D68  2684 TYPEARAA L     R7,AITL                                         02637001
00184E 92C8 7006       00006        2685          MVI   6(R7),X'C8'            MOVE IN                  02638001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.12

001852 9734 7007        00007        2686          XI    7(R7),X'34'          ID FIELD                          02639001
001856 47F0 888E              0188E  2687          B     ARRYDME1             GOTO ARRAY PROCECING              02640001
                                     2688 *                                                                     02641001
00185A 92CA DCB8        00CB8        2689 TARYDHB3 MVI   KB,X'CA'             MOVE IN                           02642001
00185E 9604 DCB9        00CB9        2690          OI    KB+1,X'04'           TYPE ARRAY SPECIFICATION ID       02643001
001862 47F0 86AE              016AE  2691          B     IDCHECK                                                02644001
                                     2692 *                                                                     02645001
                                     2693 *        ARRAY                                                        02646001
                                     2694 *                                                                     02647001
                                     2695 *        TESTS FOR PRO AND BEGBIT                                     02648001
                                     2696 *        ENTERS CHARACTERISTICS IN INTERNAL NAME                      02649001
                                     2697 *        TYPEARRAY JOINS HERE                                         02650001
                                     2698 *        PBN IS ENTERED IN INTERNAL NAME                              02651001
                                     2699 *        09 FOR ARRAY IS MOVED TO OUTPUT                              02652001
                                     2700 *        THE NAME IS CHECKED AND MOVED TO OUTPUT AND ITAB SHOULD      02653001
                                     2701 *        BE FOLLOWED BY A COMMA OR LEFT PARENTHISIS                   02654001
                                     2702 *        SETS N (NUMBER OF ARRAYS WITH SAME DIMENSIONS) TO ONE        02655001
                                     2703 *                                                                     02656001
001866 9140 DD8E        00D8E        2704 ARRAY    TM    BITS1,X'40'          PROBIT ON ?                       02657001
00186A 4710 86A4              016A4  2705          BO    SPECENT              YES                               02658001
00186E 9180 DD8E        00D8E        2706          TM    BITS1,X'80'          BEGBITI ON ?                      02659001
001872 4780 8882              01882  2707          BZ    ARRAYAA                                                02660001
001876 5090 BDC8              02DC8  2708          ST    R9,SAVE1             YES, PROCESS PROGRAM BLOCK HEAD   02661001
00187A 4590 5DCC              00DCC  2709          BAL   R9,BEG1                                                02662001
00187E 5890 BDC8              02DC8  2710          L     R9,SAVE1                                               02663001
001882 5870 DD68              00D68  2711 ARRAYAA  L     R7,AITL                                                02664001
001886 92C8 7006        00006        2712          MVI   6(R7),X'C8'          MOVE IN                           02665001
00188A 9206 7007        00007        2713          MVI   7(R7),X'06'          IO FIELD                          02666001
00188E 5860 DD70              00D70  2714 ARRYDME1 L     R6,LPBP                                                02667001
001892 D200 7008 600A 00008 0000A    2715          MVC   8(1,R7),10(R6)       MOVE IN PROGRAM BLOCK NUMBER      02668001
001898 4160 7009              00009  2716          LA    R6,9(,R7)            MOVE ADDR OF AITL+9               02669001
00189C 5060 DD5C              00D5C  2717          ST    R6,DIM               TO DIM                            02670001
0018A0 45C0 598C              0098C  2718          BAL   R12,COB                                                02671001
0018A4 9209 3000        00000        2719          MVI   0(R3),X'09'          MOVE ARRAY ID TO O/P              02672001
0018A8 4130 3001              00001  2720          LA    R3,1(,R3)                                              02673001
0018AC 4110 1001              00001  2721 ARRYNAME LA    R1,1(,R1)            GET FIRST CHAR                    02674001
0018B0 9539 1000        00000        2722          CLI   0(R1),XF9            LETTER ?                          02675001
0018B4 47D0 8910              01910  2723          BNH   ARNAMESE             NO                                02676001
0018B8 9104 DD8E        00D8E        2724          TM    BITS1,X'04'          LISTBIT ON ?                      02677001
0018BC 4710 89B0              019B0  2725          BO    ARRYMULT             YES                               02678001
0018C0 D200 DD86 BD13 00D86 02D13    2726          MVC   N(1),KF1+3           SET N=1                           02679001
0018C6 4560 58B4              008B4  2727 ARRYID   BAL   R6,IDCHECK1          CHECK, MOVE IDENT TO ITAB         02680001
0018CA 952B 1000        00000        2728 ARRYSE   CLI   0(R1),XFBLANK        O/P BLANK ?                       02681001
0018CE 4780 58D8              008D8  2729          BE    IDCHECK2                                               02682001
0018D2 9506 1000        00000        2730          CLI   0(R1),XFLBRAC        LEFT BRACKET ?                    02683001
0018D6 4780 8932              01932  2731          BE    ARRYLPAR             YES, BRANCH                       02684001
0018DA 9508 1000        00000        2732          CLI   0(R1),XFLSQBR        LEFT SQUARE BRACKET ?             02685001
0018DE 4780 8932              01932  2733          BE    ARRYLPAR             YES, BRANCH                       02686001
0018E2 9525 1000        00000        2734          CLI   0(R1),XFCOMMA        COMMA ?                           02687001
0018E6 4780 898E              0198E  2735          BE    ARCOMMA                                                02688001
0018EA 4560 56CC              006CC  2736 ARRAYERR BAL   R6,ERR2              SOMETHING ELSE FOUND              02689001
                                     2737 *                                                                     02690001
0018EE 0010                          2738          DC    X'0010'              E16                               02691001
                                     2739 *                                                                     02692001
0018F0 45C0 598C              0098C  2740          BAL   R12,COB                                                02693001
0018F4 923D 3000        00000        2741          MVI   0(R3),X'3D'          MOVE IN RHA                       02694001
0018F8 4130 3001              00001  2742          LA    R3,1(,R3)                                              02695001
0018FC 58F0 DD68              00D68  2743 ARYEXIT  L     R15,AITL                                               02696001
001900 45C0 5962              00962  2744          BAL   R12,ITABCLEA+8       CLEAR ITAB-ENTRY                  02697001
001904 94F7 DD8E        00D8E        2745 ARYEXITA NI    BITS1,X'F7'          TURN OFF ARBIT                    02698001
001908 41A0 5174              00174  2746          LA    R10,TESTLOOP         RESET RETURN REG TO MAINLOOP      02699001
00190C 47F0 8324              01324  2747          B     COMERR               SKIP TO NEXT SEMICOLON            02700001
                                     2748 *                                                                     02701001
001910 952B 1000        00000        2749 ARNAMESE CLI   0(R1),XFBLANK        NAME STARTS WITH BLANK ?          02702001
001914 4780 88AC              018AC  2750          BE    ARRYNAME             YES, BRANCH                       02703001
001918 952F 1000        00000        2751          CLI   0(R1),XFZETA         ZETA ?                            02704001
00191C 4770 8928              01928  2752          BNE   ARNAMEAA                                               02705001
001920 4190 88B0              018B0  2753          LA    R9,ARRYNAME+4                                          02706001
001924 47F0 5A28              00A28  2754          B     CIB                                                    02707001
                                     2755 *                                                                     02708001
001928 4560 578A              0078A  2756 ARNAMEAA BAL   R6,ERR7              FIRST CHAR OF NAME IN ERROR       02709001
                                     2757 *                                                                     02710001
00192C 0405                          2758          DC    X'0405'                                                02711001
                                     2759 *                                                                     02712001
00192E 47F0 88FC              018FC  2760          B     ARYEXIT              DELETE DECLARATION                02713001
                                     2761 *                                                                     02714001
                                     2762 *        ARRAYPAR                                                     02715001
                                     2763 *                                                                     02716001
                                     2764 *        ENTERED WHEN A LEFT BRACKET OR LEFT SQUARE BRACKET IS        02717001
                                     2765 *        FOUND AFTER THE NAME                                         02718001
                                     2766 *        INITIALIZES D DIMENSION COUNTER=0                            02719001
                                     2767 *        SETS THE ARBIT C PARENTHESIS COUNT=1                         02720001
                                     2768 *        SEARCHES FOR A SLASH                                         02721001
                                     2769 *        MOVES OUT SUBSCRIPT BRACKETS TO OUTPUT                       02722001
                                     2770 *        EXITS TO ARRAYLIST                                           02723001
                                     2771 *                                                                     02724001
001932 9608 DD8E        00D8E        2772 ARRYLPAR OI    BITS1,X'08'          ARBIT = 1                         02725001
001936 41C0 0001              00001  2773          LA    R12,1                                                  02726001
00193A 40C0 DCB6              00CB6  2774          STH   R12,C                C=1                               02727001
00193E 41C0 0000              00000  2775          LA    R12,0                                                  02728001
001942 42C0 DCD5              00CD5  2776          STC   R12,D                D=0                               02729001
001946 9508 1000        00000        2777          CLI   0(R1),XFLSQBR        LEFT SQUARE BRACKET ON ENTRY ?    02730001
00194A 4780 897A              0197A  2778          BE    ARRYLSQB             YES, BRANCH                       02731001
00194E 4110 1001              00001  2779          LA    R1,1(,R1)            GET NEXT CHAR                     02732001
001952 9503 1000        00000        2780 ARRYSLSH CLI   0(R1),XFSLASH        SLASH ?                           02733001
001956 4780 897A              0197A  2781          BE    ARRYLSQB             YES, MOVE IN LEFT SQUARE BRACKET  02734001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

00195A 952B 1000        00000        2782          CLI   0(R1),XFBLANK          BLANK ?                   02735001
00195E 4780 894E              0194E  2783          BE    ARRYSLSH-4             YES, GET NEXT CHAR        02736001
001962 952F 1000        00000        2784          CLI   0(R1),XFZETA           ZETA ?                    02737001
001966 4770 8972              01972  2785          BNE   ARRYSLAA               NO, GOTO ERROR ROUTINE    02738001
00196A 4190 8952              01952  2786          LA    R9,ARRYSLSH            YES, CHANGE               02739001
00196E 47F0 5A28              00A28  2787          B     CIB                    INPUT BUFFER              02740001
                                     2788 *                                                               02741001
001972 4560 56CC              006CC  2789 ARRYSLAA BAL   R6,ERR2                                          02742001
                                     2790 *                                                               02743001
001976 001F                          2791          DC    X'001F'                E31                       02744001
                                     2792 *                                                               02745001
001978 0610                          2793          BCTR  R1,0                                             02746001
00197A 45C0 598C              0098C  2794 ARRYLSQB BAL   R12,COB                CHECK IF O/P AREA FILLED  02747001
00197E 9208 3000        00000        2795          MVI   0(R3),XFLSQBR          MOVE IN LEFT SQUARE BRACKET 02748001
001982 4130 3001              00001  2796          LA    R3,1(,R3)              INCR                      02749001
001986 4110 1001              00001  2797          LA    R1,1(,R1)              POINTERS                  02750001
00198A 47F0 89C4              019C4  2798          B     LIST                   GOTO PROCESS ARRAY LIST   02751001
                                     2799 *                                                               02752001
                                     2800 *        ARCOMMA                                                02753001
                                     2801 *                                                               02754001
                                     2802 *        COPIES INTERNAL PART OF ITAB ENTRY SETS THE LISBIT     02755001
                                     2803 *        EXITS TO ARRAYNAME TO CHECK FIRST CHARACTER OF NEXT NAME 02756001
                                     2804 *        THE LIST BIT WILL THEN CAUSE ARRAYMULT TO BE           02757001
                                     2805 *        EXECUTED BEFORE THE REST OF THE NAME IS CHECKED        02758001
                                     2806 *        INCREASES N, NUMBER OF ARRAYS WITH THE SAME DIMENSIONS, 02759001
                                     2807 *        BY ONE                                                 02760001
                                     2808 *                                                               02761001
00198E 5890 DD68              00D68  2809 ARCOMMA  L     R9,AITL                SAVE AITL                 02762001
001992 45C0 595A              0095A  2810          BAL   R12,ITABCLEA           CHECK AND CLEAR NEXT ITABENTRY 02763001
001996 D202 F006 9006 00006 00006    2811          MVC   6(3,R15),6(R9)         COPY ID AND PBN FIELDS    02764001
00199C 4360 DD86              00D86  2812          IC    R6,N                   INCREASE                  02765001
0019A0 4160 6001              00001  2813          LA    R6,1(,R6)              N                         02766001
0019A4 4260 DD86              00D86  2814          STC   R6,N                   BY ONE                    02767001
0019A8 9604 DD8E        00D8E        2815          OI    BITS1,X'04'            SET LISTBIT TO ONE        02768001
0019AC 47F0 88AC              018AC  2816          B     ARRYNAME               GET NEXT EXTERNAL NAME    02769001
                                     2817 *                                                               02770001
                                     2818 *        ARRAYMULT                                              02771001
                                     2819 *                                                               02772001
                                     2820 *        MOVES OUT THE COMMA PREVIOUSLY FOUND                   02773001
                                     2821 *        SETS THE LISTBIT TO ZERO                               02774001
                                     2822 *        RETURNS TO ARRAYID (AVOIDS RESETING N TO ONE)          02775001
                                     2823 *                                                               02776001
0019B0 45C0 598C              0098C  2824 ARRYMULT BAL   R12,COB                                          02777001
0019B4 9225 3000        00000        2825          MVI   0(R3),XFCOMMA          MOVE OUT THE COMMA        02778001
0019B8 4130 3001              00001  2826          LA    R3,1(,R3)                                        02779001
0019BC 94FB DD8E        00D8E        2827          NI    BITS1,X'FB'            SET LISTBIT TO ZERO       02780001
0019C0 47F0 88C6              018C6  2828          B     ARRYID                                           02781001
                                     2829 *                                                               02782001
                                     2830 *        LIST                                                   02783001
                                     2831 *                                                               02784001
                                     2832 *        USED FOR ARRAY AND SWITCH LIST PROCESSING              02785001
                                     2833 *        MAKES THE TRT AGAINST ARTABLE AND UTILIZES MAINLOOP TO 02786001
                                     2834 *        MOVE SCANNED BYTES AND BRANCH TO THE APPROPRIATE       02787001
                                     2835 *        PROGRAM, EITHER A LIST PROGRAM OR ONE OF THE COMMON    02788001
                                     2836 *        PROGRAMS. THE RETURN WILL BE TO LIST VIA R10           02789001
                                     2837 *        R10 WILL POINT TO LIST UNTIL CHANGED BY ENDLIST TO     02790001
                                     2838 *        POINT TO TESTLOOP AGAIN                                02791001
                                     2839 *                                                               02792001
0019C4 05A0                          2840 LIST     BALR  R10,0                  SET RETURN REGISTER       02793001
0019C6 1841                          2841          LR    R4,R1                  START CHAR IN SCAN        02794001
0019C8 189A                          2842          LR    R9,R10                 RETURN FROM CIB           02795001
0019CA 1B22                          2843          SR    R2,R2                                            02796001
0019CC DD48 1000 B8D0 00000 028D0    2844          TRT   0(73,R1),ARTABLE       SCAN AGAINST AR TABLE     02797001
0019D2 47F0 518A              0018A  2845          B     CONT                   UTILIZE TESTLOOP          02798001
                                     2846 *                                                               02799001
                                     2847 *        PONTLST                                                02800001
                                     2848 *                                                               02801001
                                     2849 *        USES THE SAME POINTABEL AS MAINLOOP BUT ADDS 56 TO THE 02802001
                                     2850 *        DISPLACEMENTS                                          02803001
                                     2851 *                                                               02804001
0019D6 4110 1001              00001  2852 PONTLST  LA    R1,1(,R1)              GET NEXT CHAR             02805001
0019DA 1B22                          2853          SR    R2,R2                                            02806001
0019DC DD48 1000 B758 00000 02758    2854          TRT   0(73,R1),PTTABLE       SCAN TO NEXT DELIMITER    02807001
0019E2 4160 B6C4              026C4  2855          LA    R6,BPRTAB              IN PTTABLE                02808001
0019E6 5866 2038              00038  2856          L     R6,56(R6,R2)                                     02809001
0019EA 07F6                          2857          BR    R6                     BRANCH ACCORDING TO 56+   02810001
                                     2858 *                                 DISP+ BPRTAB              02811001
0019EC 4190 89DA              019DA  2859 PZETA    LA    R9,PONTLST+4           ZETA IN POINTLIST         02812001
0019F0 47F0 5A28              00A28  2860          B     CIB                                              02813001
                                     2861 *                                                               02814001
                                     2862 *        RIGTPARL                                               02815001
                                     2863 *                                                               02816001
                                     2864 *        MOVES OUT THE RIGHT PARENTHESIS                        02817001
                                     2865 *        DECREASES THE PARENTHESIS COUNT AND RETURNS TO LIST    02818001
                                     2866 *                                                               02819001
0019F4 45C0 598C              0098C  2867 RIGTPARL BAL   R12,COB                CHECK IF O/P AREA FILLED  02820001
0019F8 9226 3000        00000        2868          MVI   0(R3),XFRBRAC          MOVE IN RIGHT BRACKET     02821001
0019FC 4130 3001              00001  2869          LA    R3,1(,R3)                                        02822001
001A00 4110 1001              00001  2870          LA    R1,1(,R1)              GET NEXT  CHAR            02823001
001A04 4860 DCB6              00CB6  2871          LH    R6,C                                             02824001
001A08 0660                          2872          BCTR  R6,0                   DECREASE PARENTHESIS COUNT 02825001
001A0A 4060 DCB6              00CB6  2873          STH   R6,C                                             02826001
001A0E 07FA                          2874          BR    R10                                              02827001
                                     2875 *                                                               02828001
                                     2876 *        LEFTPARL                                               02829001
                                     2877 *                                                               02830001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                   2878 *        INCREASES THE PARENTHESIS COUNT                                  02831001
                                   2879 *        CHECKS IF NEXT CHARACTER IS A SLASH, IF IT IS MOVES A            02832001
                                   2880 *        SUBSCRIPT BRACKET OUTPUT, IF NOT MOVES A SIMPLE                  02833001
                                   2881 *        PARENTHESIS                                                      02834001
                                   2882 *                                                                         02835001
001A10 4860 DCB6            00CB6  2883 LEFTPARL LH    R6,C                 INCREASE PARENTHESIS COUNT             02836001
001A14 4160 6001            00001  2884          LA    R6,1(,R6)                                                   02837001
001A18 4060 DCB6            00CB6  2885          STH   R6,C                                                        02838001
001A1C 9508 1000      00000        2886          CLI   0(R1),XFLSQBR        LEFT SQUARE BRACKET ON INPUT ?         02839001
001A20 4780 8A30            01A30  2887          BE    LPARDQAA             YES, BRANCH                            02840001
001A24 4110 1001            00001  2888 LPARDQC3 LA    R1,1(,R1)            GET NEXT CHAR                          02841001
001A28 9503 1000      00000        2889          CLI   0(R1),XFSLASH        SLASH ?                                02842001
001A2C 4770 8A42            01A42  2890          BNE   SIMPLPAR             NO, SIMPLE PARENTHESIS                 02843001
001A30 45C0 598C            0098C  2891 LPARDQAA BAL   R12,COB              CHECK IF O/P AREA FILLED               02844001
001A34 9208 3000      00000        2892          MVI   0(R3),XFLSQBR        YES, MOVE IN SQUARE BRACKET            02845001
001A38 4110 1001            00001  2893 LPARDQ63 LA    R1,1(,R1)            INCREASE POINTERS                      02846001
001A3C 4130 3001            00001  2894          LA    R3,1(,R3)                                                   02847001
001A40 07FA                        2895          BR    R10                  RETURN                                 02848001
                                   2896 *                                                                         02849001
001A42 952B 1000      00000        2897 SIMPLPAR CLI   0(R1),XFBLANK        NEXT CHAR BLANK ?                      02850001
001A46 4780 8A24            01A24  2898          BE    LPARDQC3             YES                                    02851001
001A4A 952F 1000      00000        2899          CLI   0(R1),XFZETA         NO, ZETA ?                             02852001
001A4E 4770 8A5A            01A5A  2900          BNE   SIMPLPAA                                                    02853001
001A52 4190 8A28            01A28  2901          LA    R9,LPARDQC3+4                                               02854001
001A56 47F0 5A28            00A28  2902          B     CIB                                                         02855001
                                   2903 *                                                                         02856001
001A5A 45C0 598C            0098C  2904 SIMPLPAA BAL   R12,COB              CHECK IF O/P AREA FILLED               02857001
001A5E 9206 3000      00000        2905          MVI   0(R3),XFLBRAC        MOVE IN LEFT PARENTHESIS               02858001
001A62 47F0 8A3C            01A3C  2906          B     LPARDQ63+4                                                  02859001
                                   2907 *                                                                         02860001
                                   2908 *        COMMALST                                                         02861001
                                   2909 *                                                                         02862001
                                   2910 *        INCREASES THE DIEMSION COUNTER D IF C THE PARENTHESIS            02863001
                                   2911 *        COUNTER IS 1 FOR ARRAY OR 0 FOR SWITCH LIST                      02864001
                                   2912 *                                                                         02865001
001A66 9108 DD8E      00D8E        2913 COMMALST TM    BITS1,X'08'          AR BIT = 0 ?                           02866001
001A6A 4780 8A96            01A96  2914          BZ    COMMAG3                                                     02867001
001A6E D501 DCB6 BD12 00CB6 02D12  2915          CLC   C(2),KF1+2           C=1 ?                                  02868001
001A74 4770 8A84            01A84  2916          BNE   COMMAJ2              NO                                     02869001
001A78 4320 DCD5            00CD5  2917 COMMAH2  IC    R2,D                 INCREASE D-COUNTER                     02870001
001A7C 4120 2001            00001  2918          LA    R2,1(,R2)                                                   02871001
001A80 4220 DCD5            00CD5  2919          STC   R2,D                                                        02872001
001A84 45C0 598C            0098C  2920 COMMAJ2  BAL   R12,COB              CHECK IF O/P AREA FILLED               02873001
001A88 9225 3000      00000        2921          MVI   0(R3),XFCOMMA        MOVE COMMA TO OUTPUT                   02874001
001A8C 4130 3001            00001  2922          LA    R3,1(,R3)            INCREASE POINTERS                      02875001
001A90 4110 1001            00001  2923          LA    R1,1(,R1)                                                   02876001
001A94 07FA                        2924          BR    R10                                                         02877001
                                   2925 *                                                                         02878001
001A96 D501 DCB6 BD0C 00CB6 02D0C  2926 COMMAG3  CLC   C(2),KF0             C=0 ?                                  02879001
001A9C 4780 8A78            01A78  2927          BE    COMMAH2                                                     02880001
001AA0 47F0 8A84            01A84  2928          B     COMMAJ2                                                     02881001
                                   2929 *                                                                         02882001
                                   2930 *        COLONLST                                                         02883001
                                   2931 *                                                                         02884001
                                   2932 *        CORRECT ONLY FOR AN ARRAY LIST                                   02885001
                                   2933 *                                                                         02886001
001AA4 9108 DD8E      00D8E        2934 COLONLST TM    BITS1,X'08'          ARBIT ON ?                             02887001
001AA8 4780 570A            0070A  2935          BZ    ERROR3               E3 COLON DELETE D                      02888001
001AAC 45C0 598C            0098C  2936          BAL   R12,COB              CHECK IF O/P AREA FILLED               02889001
001AB0 9207 3000      00000        2937          MVI   0(R3),XFCOLON        MOVE COLON TO O/P                      02890001
001AB4 4130 3001            00001  2938          LA    R3,1(,R3)                                                   02891001
001AB8 4110 1001            00001  2939          LA    R1,1(,R1)            GET NEXT CHAR                          02892001
001ABC 07FA                        2940          BR    R10                  AND RETURN                             02893001
                                   2941 *                                                                         02894001
                                   2942 *        SEMCLST                                                          02895001
                                   2943 *                                                                         02896001
                                   2944 *        IS ONLY VALID FOR AN SWITCH IN WHICH CASE INDICATES              02897001
                                   2945 *        THE END OF THE SWITCH LIST                                       02898001
                                   2946 *        THE NUMBER OF COMPONENTS IS INSERTED IN THE INTERNAL             02899001
                                   2947 *        NAME                                                             02900001
                                   2948 *        EXIT IS TO ENDLIST                                               02901001
                                   2949 *                                                                         02902001
001ABE 9108 DD8E      00D8E        2950 SEMCLST  TM    BITS1,X'08'          ARBIT=1 ?                              02903001
001AC2 4710 8AF4            01AF4  2951          BO    SEMCLER              YES, ERROR                             02904001
                                   2952 *                                                                         02905001
                                   2953 *        END OF SWITCH HANDLING                                           02906001
                                   2954 *                                                                         02907001
001AC6 9510 DCD5      00CD5        2955          CLI   D,16                 MORE THAN 15 COMPONENTS ?              02908001
001ACA 4740 8AD8            01AD8  2956          BL    SEMCLAA                                                     02909001
001ACE 4560 56CC            006CC  2957          BAL   R6,ERR2                                                     02910001
                                   2958 *                                                                         02911001
001AD2 0021                        2959          DC    X'0021'              E33                                    02912001
                                   2960 *                                                                         02913001
001AD4 47F0 5728            00728  2961          B     COMPFIN                                                     02914001
                                   2962 *                                                                         02915001
001AD8 5870 DD68            00D68  2963 SEMCLAA  L     R7,AITL              INSERT DIMENSION COUNTER               02916001
001ADC 1B66                        2964          SR    R6,R6                                                       02917001
001ADE 4360 DCD5            00CD5  2965          IC    R6,D                                                        02918001
001AE2 8B60 0004            00004  2966          SLA   R6,4                 IN LEFTMOST 4 BYTES                    02919001
001AE6 4260 DCD5            00CD5  2967          STC   R6,D                                                        02920001
001AEA D300 7009 DCD5 00009 00CD5  2968          MVZ   9(1,R7),D            IN DECLARATION                         02921001
001AF0 47F0 8C06            01C06  2969          B     ENDLIST              GO TO ENDLIST                          02922001
                                   2970 *                                                                         02923001
                                   2971 *        SEMCLER                                                          02924001
                                   2972 *                                                                         02925001
                                   2973 *        ENTERED IF A SEMICOLON IS FOUND IN AN ARRAY LIST                 02926001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12

                                   2974 *       GIVES E32, CLEAR THE ITAB ENTRY SETS THE ARBIT OFF,                  02927001
                                   2975 *       DELTABIT ON AND RETURNS TO TEST VIA SEMCO                            02928001
                                   2976 *                                                                            02929001
001AF4 4560 56CC            006CC  2977 SEMCLER  BAL   R6,ERR2                                                       02930001
                                   2978 *                                                                            02931001
001AF8 0020                        2979          DC    X'0020'                E32                                    02932001
                                   2980 *                                                                            02933001
001AFA 58F0 DD68            00D68  2981          L     R15,AITL                                                      02934001
001AFE 45C0 5962            00962  2982          BAL   R12,ITABCLEC           CLEAR THE ENTRY                        02935001
001B02 9620 DD8E      00D8E        2983          OI    BITS1,X'20'            DELTABIT ON                            02936001
001B06 94F7 DD8E      00D8E        2984          NI    BITS1,X'F7'            ARRAYBIT OFF                           02937001
001B0A 47F0 55D4            005D4  2985          B     SEMCO                  RETURN TO SEMCO, WILL RESET R10        02938001
                                   2986 *                                                                            02939001
                                   2987 *       SLASHLST                                                             02940001
                                   2988 *                                                                            02941001
                                   2989 *       CHECKS IF NEXT CHARACTER IS A RIGHT PARENTHESIS                      02942001
                                   2990 *       IT IS NOT MOVES OUT A SLASH                                          02943001
                                   2991 *       IF IT IS MOVES OUT A RIGHT SQUARE BRACKET                            02944001
                                   2992 *       DECREASES THE PARENTHESIS COUNT                                      02945001
                                   2993 *       RETURNS TO LIST IF EITHER AN SWITCH LIST IS PROCESSED                02946001
                                   2994 *       OR THE PARENTHESIS COUNT NOT IS 0                                    02947001
                                   2995 *                                                                            02948001
001B0E 9528 1000      00000        2996 SLASHLST CLI   0(R1),XFRSQBR          RIGHT SQUARE BRACKET ON ENTRY ?        02949001
001B12 4780 8B22            01B22  2997          BE    SLASHRSB               YES, BRANCH                            02950001
001B16 4110 1001            00001  2998          LA    R1,1(,R1)              GET NEXT CHAR                          02951001
001B1A 9526 1000      00000        2999          CLI   0(R1),XFRBRAC          RIGHT BRACKET ?                        02952001
001B1E 4770 8B96            01B96  3000          BNE   SLASHSE                NO SOMETHING ELSE                      02953001
001B22 45C0 598C            0098C  3001 SLASHRSB BAL   R12,COB                CHECK IF O/P AREA FILLED               02954001
001B26 9228 3000      00000        3002          MVI   0(R3),XFRSQBR          TRANSFER A RIGHT SQUARE BRACKET        02955001
001B2A 4130 3001            00001  3003          LA    R3,1(,R3)                                                     02956001
001B2E 4110 1001            00001  3004          LA    R1,1(,R1)                                                     02957001
001B32 4860 DCB6            00CB6  3005          LH    R6,C                   DECREASE PARENTHESIS COUNT             02958001
001B36 0660                        3006          BCTR  R6,0                                                          02959001
001B38 4060 DCB6            00CB6  3007          STH   R6,C                                                          02960001
001B3C 9108 DD8E      00D8E        3008          TM    BITS1,X'08'            ARBIT = 1 ?                            02961001
001B40 4780 A000            00000  3009          BZ    0(,R10)                NO, RETURN                             02962001
001B44 D501 DCB6 BD0C 00CB6 02D0C  3010          CLC   C(2),KF0               C=0 ?                                  02963001
001B4A 4770 A000            00000  3011          BNE   0(,R10)                NO, RETURN                             02964001
                                   3012 *                                                                            02965001
                                   3013 *       ARRAY END HANDLING                                                   02966001
                                   3014 *                                                                            02967001
                                   3015 *       INSERT THE DIMENSION COUNTERS IN THE INTERNAL NAME OR                02968001
                                   3016 *       NAMES IF MORE THAN ONE ARRAY WITH THE SAME DIMENSIONS                02969001
                                   3017 *                                                                            02970001
                                   3018 *       IF A COMMA FOLLOWS THE CHARACTERISTICS AND THE PBN IS                02971001
                                   3019 *       COPIED AND THE NEXT ARRAY NAME IS HANDLED                            02972001
                                   3020 *       IF A SEMICOLON FOLLOWS ENDLIST IS ACTIVATED                          02973001
                                   3021 *                                                                            02974001
001B4E 4320 DCD5            00CD5  3022          IC    R2,D                                                          02975001
001B52 9510 DCD5      00CD5        3023          CLI   D,16                   MORE THAN 16 DIMENSIONS ?              02976001
001B56 4740 8B64            01B64  3024          BL    SLASHLAA                                                      02977001
001B5A 4560 56CC            006CC  3025          BAL   R6,ERR2                                                       02978001
                                   3026 *                                                                            02979001
001B5E 0021                        3027          DC    X'0021'                E00                                    02980001
                                   3028 *                                                                            02981001
001B60 47F0 5728            00728  3029          B     COMPFIN                                                       02982001
                                   3030 *                                                                            02983001
001B64 8B20 0004            00004  3031 SLASHLAA SLA   R2,4                   SHIFT DIMENSION COUNTER                02984001
001B68 4220 DCD5            00CD5  3032          STC   R2,D                                                          02985001
001B6C 5860 DD5C            00D5C  3033 SLASHREP L     R6,DIM                                                        02986001
001B70 D300 6000 DCD5 00000 00CD5  3034          MVZ   0(1,R6),D              INSERT DIMENSION COUNTER               02987001
001B76 4160 600B            0000B  3035          LA    R6,11(,R6)             INCREASE DIM POINTER                   02988001
001B7A 5060 DD5C            00D5C  3036          ST    R6,DIM                                                        02989001
001B7E 43C0 DD86            00D86  3037          IC    R12,N                  DECREASE                               02990001
001B82 06C0                        3038          BCTR  R12,0                  REP DECLARATION COUNTER                02991001
001B84 42C0 DD86            00D86  3039          STC   R12,N                                                         02992001
001B88 D500 DD86 BD0C 00D86 02D0C  3040          CLC   N(1),KF0               ZERO ?                                 02993001
001B8E 4770 8B6C            01B6C  3041          BNE   SLASHREP               NO, INSERT DIM IN NEXT                 02994001
001B92 47F0 8BC0            01BC0  3042          B     SLASHEND+4             ITAB ENTRY                             02995001
                                   3043 *                                                                            02996001
001B96 952B 1000      00000        3044 SLASHSE  CLI   0(R1),XFBLANK          BLANK ?                                02997001
001B9A 4780 8B0E            01B0E  3045          BE    SLASHLST                                                      02998001
001B9E 952F 1000      00000        3046          CLI   0(R1),XFZETA           ZETA ?                                 02999001
001BA2 4770 8BAE            01BAE  3047          BNE   SLASHLBB                                                      03000001
001BA6 4190 8B12            01B12  3048          LA    R9,SLASHLST+4                                                 03001001
001BAA 47F0 5A28            00A28  3049          B     CIB                                                           03002001
                                   3050 *                                                                            03003001
001BAE 45C0 598C            0098C  3051 SLASHLBB BAL   R12,COB                CHECK IF O/P AREA FILLED               03004001
001BB2 9203 3000      00000        3052          MVI   0(R3),XFSLASH          MOVE IN A SLASH                        03005001
001BB6 4130 3001            00001  3053          LA    R3,1(,R3)                                                     03006001
001BBA 07FA                        3054          BR    R10                                                           03007001
                                   3055 *                                                                            03008001
001BBC 4110 1001            00001  3056 SLASHEND LA    R1,1(,R1)              GET NEXT CHAR                          03009001
001BC0 9525 1000      00000        3057          CLI   0(R1),XFCOMMA          COMMA ?                                03010001
001BC4 4770 8BE6            01BE6  3058          BNE   SLSHENSE               NO SOMETHING ELSE                      03011001
001BC8 45C0 598C            0098C  3059          BAL   R12,COB                CHECK IF O/P AREA FILLED               03012001
001BCC 9225 3000      00000        3060          MVI   0(R3),XFCOMMA          MOVE IN A COMMA                        03013001
001BD0 4130 3001            00001  3061          LA    R3,1(,R3)                                                     03014001
001BD4 5890 DD68            00D68  3062          L     R9,AITL                SAVE AITL                              03015001
001BD8 45C0 595A            0095A  3063          BAL   R12,ITABCLEA           CHECK AND CLEAR NEXT ITABENTRY         03016001
001BDC D202 F006 9006 00006 00006  3064          MVC   6(3,R15),6(R9)         COPY ID AND PBN FIELDS                 03017001
001BE2 47F0 88AC            018AC  3065          B     ARRYNAME               GET NEXT NAME                          03018001
                                   3066 *                                                                            03019001
001BE6 952B 1000      00000        3067 SLSHENSE CLI   0(R1),XFBLANK          BLANK ?                                03020001
001BEA 4780 8BBC            01BBC  3068          BE    SLASHEND                                                      03021001
001BEE 952F 1000      00000        3069          CLI   0(R1),XFZETA           ZETA ?                                 03022001
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  Active USINGs: WORKAREA,R13  IEX11000,R5,R8,R11

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.12

001BF2 4770 8BFE              01BFE  3070          BNE   SLASHLCC                                          03023001
001BF6 4190 8BC0              01BC0  3071          LA    R9,SLASHEND+4                                     03024001
001BFA 47F0 5A28              00A28  3072          B     CIB                                               03025001
                                     3073 *                                                                03026001
001BFE 4160 8C1A              01C1A  3074 SLASHLCC LA    R6,SLASHERR           RETURN IF NO SEMICOLON FOUND  03027001
001C02 45C0 5912              00912  3075          BAL   R12,FINDSEMC          LOOK FOR SEMICOLON            03028001
                                     3076 *                                                                03029001
                                     3077 *        ENDLIST                                                 03030001
                                     3078 *                                                                03031001
                                     3079 *        SETS DELTABIT TO ONE, ARBIT TO ZERO, CLEARS NEXT ITABENTRY  03032001
                                     3080 *                                                                03033001
                                     3081 *        RESETS THE RETUN REGISTER TO TEST                       03034001
                                     3082 *        RETURNS TO TESTLOOP VIA SEMCO                           03035001
                                     3083 *                                                                03036001
001C06 9620 DD8E        00D8E        3084 ENDLIST  OI    BITS1,X'20'           DELTA BIT =1                  03037001
001C0A 94F7 DD8E        00D8E        3085          NI    BITS1,X'F7'           ARBIT= 0                      03038001
001C0E 45C0 595A              0095A  3086          BAL   R12,ITABCLEA          CHECK AND CLEAR NEXT ITABENTRY  03039001
001C12 41A0 5174              00174  3087          LA    R10,TESTLOOP          RESET RETURN REG TO MAINLOOP  03040001
001C16 47F0 55D4              005D4  3088          B     SEMCO                 GO TO SEMICOLON PROGRAM       03041001
                                     3089 *                                                                03042001
001C1A 4560 56CC              006CC  3090 SLASHERR BAL   R6,ERR2                                           03043001
                                     3091 *                                                                03044001
001C1E 0022                          3092          DC    X'0022'               E34                           03045001
                                     3093 *                                                                03046001
001C20 45C0 595A              0095A  3094          BAL   R12,ITABCLEA          CHECK AND CLEAR NEXT ITABENTRY  03047001
001C24 47F0 8904              01904  3095          B     ARYEXITA              CLEAR ENTRY IN ITAB AND RETURN  03048001
                                     3096 *                                                                03049001
                                     3097 *        SWITCH                                                  03050001
                                     3098 *                                                                03051001
                                     3099 *        TESTS ON PROBIT (SPECIFICATION) AND BEGBIT (PROGRAM     03052001
                                     3100 *        BLOCK HEAD)                                             03053001
                                     3101 *        INSERTS CHARACTERISTICS AND PBN IN INTERNAL NAME        03054001
                                     3102 *        INCREASES AND INSERTS LABELNUMBER LN                    03055001
                                     3103 *        MOVES 0A SWITCH TO OUTPUT                               03056001
                                     3104 *        SETS ARBIT TO ZERO                                      03057001
                                     3105 *        CHECKS THE NAME FOR VALIDITY AND MOVES FIRST 6          03058001
                                     3106 *        CHARACTERS TO OUTPUT AND ITAB VIA IDCHECK               03059001
                                     3107 *        SEARCHES FOR ASSIGN TO FOLLOW THE SWITCHNAME            03060001
                                     3108 *        INITIALIZES C PARENTHESIS COUNT AND D DIMENSION COUNT   03061001
                                     3109 *        WITH ZERO AND N WITH ONE                                03062001
                                     3110 *        EXITS TO LIST                                           03063001
                                     3111 *                                                                03064001
001C28 9140 DD8E        00D8E        3112 SWITCH   TM    BITS1,X'40'           PROCEDURE HEAD ?              03065001
001C2C 4710 86A4              016A4  3113          BO    SPECENT               YES                           03066001
001C30 9180 DD8E        00D8E        3114          TM    BITS1,X'80'           BLOCK START ?                 03067001
001C34 4780 8C44              01C44  3115          BZ    SWITCHAA                                          03068001
001C38 5090 BDC8              02DC8  3116          ST    R9,SAVE1                                          03069001
001C3C 4590 5DCC              00DCC  3117          BAL   R9,BEG1               YES, PROCESS BLOCK BEGIN      03070001
001C40 5890 BDC8              02DC8  3118          L     R9,SAVE1                                          03071001
001C44 58F0 DD68              00D68  3119 SWITCHAA L     R15,AITL              MOVE IN ID FIELDS             03072001
001C48 92CC F006        00006        3120          MVI   6(R15),X'CC'                                      03073001
001C4C 920C F007        00007        3121          MVI   7(R15),X'0C'                                      03074001
001C50 58C0 DD70              00D70  3122          L     R12,LPBP                                          03075001
001C54 D200 F008 C00A 00008 0000A    3123          MVC   8(1,R15),10(R12)      AND PBN- NUMBER               03076001
001C5A 48C0 D0A2              000A2  3124          LH    R12,LN                INCREASE LABEL NUMBER         03077001
001C5E 41C0 C004              00004  3125          LA    R12,4(,R12)                                       03078001
001C62 D501 D0A2 BD58 000A2 02D58    3126          CLC   LN(2),KH4096          LN OVERFLOW ?                 03079001
001C68 4740 8C76              01C76  3127          BL    SWITCHBB                                          03080001
001C6C 4560 578A              0078A  3128          BAL   R6,ERR7                                           03081001
                                     3129 *                                                                03082001
001C70 04D8                          3130          DC    X'04D8'               E216                          03083001
                                     3131 *                                                                03084001
001C72 41C0 006C              0006C  3132          LA    R12,LATBEG            RESET LN                      03085001
001C76 40C0 D0A2              000A2  3133 SWITCHBB STH   R12,LN                                            03086001
001C7A D201 F009 D0A2 00009 000A2    3134          MVC   9(2,R15),LN           MOVE IN LABEL NUMBER          03087001
001C80 45C0 598C              0098C  3135          BAL   R12,COB               CHECK IF O/P AREA FILLED      03088001
001C84 920A 3000        00000        3136          MVI   0(R3),X'0A'           MOVE IN $ SWITCH              03089001
001C88 4130 3001              00001  3137          LA    R3,1(,R3)                                         03090001
001C8C 94F7 DD8E        00D8E        3138          NI    BITS1,X'F7'           SET ARBIT TO ZERO             03091001
001C90 4110 1001              00001  3139 SWTCHB3  LA    R1,1(,R1)             GET FIRST CHAR                03092001
001C94 9539 1000        00000        3140          CLI   0(R1),XF9             LETTER ?                      03093001
001C98 4740 8D2A              01D2A  3141          BL    SWTCHNSE              NO                            03094001
001C9C 4560 58B4              008B4  3142          BAL   R6,IDCHECK1           INITIALIZE N WITH ONE         03095001
001CA0 952B 1000        00000        3143 SWITCHSE CLI   0(R1),XFBLANK         BLANK ?                       03096001
001CA4 4780 58D8              008D8  3144          BE    IDCHECK2                                          03097001
001CA8 9507 1000        00000        3145          CLI   0(R1),XFCOLON         COLON ?                       03098001
001CAC 4780 8CE4              01CE4  3146          BE    SWCOLON                                           03099001
001CB0 952D 1000        00000        3147          CLI   0(R1),XFPERIOD        PERIOD ?                      03100001
001CB4 4770 8D4C              01D4C  3148          BNE   SWITCHER                                          03101001
001CB8 4110 1001              00001  3149 SWPOINT  LA    R1,1(,R1)             ONE POINT HAS BEEN FOUND      03102001
001CBC 952D 1000        00000        3150          CLI   0(R1),XFPERIOD        ONE MORE PERIOD ?             03103001
001CC0 4780 8CE4              01CE4  3151          BE    SWCOLON                                           03104001
001CC4 9510 1000        00000        3152          CLI   0(R1),XFEQUAL         EQUAL ?                       03105001
001CC8 4780 8D08              01D08  3153          BE    EQUALOK                                           03106001
001CCC 952B 1000        00000        3154          CLI   0(R1),XFBLANK         BLANK ?                       03107001
001CD0 4780 8CB8              01CB8  3155          BE    SWPOINT                                           03108001
001CD4 952F 1000        00000        3156          CLI   0(R1),XFZETA          ZETA ?                        03109001
001CD8 4770 8D4C              01D4C  3157          BNE   SWITCHER                                          03110001
001CDC 4190 8CBC              01CBC  3158          LA    R9,SWPOINT+4                                      03111001
001CE0 47F0 5A28              00A28  3159          B     CIB                                               03112001
                                     3160 *                                                                03113001
001CE4 4110 1001              00001  3161 SWCOLON  LA    R1,1(,R1)             A COLON OR TWO POINTS ARE FOUND  03114001
001CE8 9510 1000        00000        3162          CLI   0(R1),XFEQUAL         EQUAL ?                       03115001
001CEC 4780 8D08              01D08  3163          BE    EQUALOK               YES '= OR  = OR  = ARE FOUND  03116001
001CF0 952B 1000        00000        3164          CLI   0(R1),XFBLANK         BLANK ?                       03117001
001CF4 4780 8CE4              01CE4  3165          BE    SWCOLON                                           03118001
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  Active USINGs: WORKAREA,R13  IEX11000,R5,R8,R11

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

001CF8 952F 1000      00000        3166          CLI   0(R1),XFZETA           ZETA ?                    03119001
001CFC 4770 8D4C            01D4C  3167          BNE   SWITCHER                                         03120001
001D00 4190 8CE8            01CE8  3168          LA    R9,SWCOLON+4                                     03121001
001D04 47F0 5A28            00A28  3169          B     CIB                                              03122001
                                   3170 *                                                               03123001
001D08 45C0 598C            0098C  3171 EQUALOK  BAL   R12,COB                CHECK IF O/P AREA FILLED  03124001
001D0C 9216 3000      00000        3172          MVI   0(R3),XFASSIGN         MOVE IN ASSIGNMENT        03125001
001D10 4130 3001            00001  3173          LA    R3,1(,R3)              INCREASE O/P POINTER      03126001
001D14 1B66                        3174          SR    R6,R6                                            03127001
001D16 4060 DCB6            00CB6  3175          STH   R6,C                   C=0                       03128001
001D1A 9201 DD86      00D86        3176          MVI   N,X'01'                N=1                       03129001
001D1E 4260 DCD5            00CD5  3177          STC   R6,D                   D=0                       03130001
001D22 4110 1001            00001  3178          LA    R1,1(,R1)              GET NEXT CHAR             03131001
001D26 47F0 89C4            019C4  3179          B     LIST                   GO TO PROCESS LIST        03132001
                                   3180 *                                                               03133001
001D2A 952B 1000      00000        3181 SWTCHNSE CLI   0(R1),XFBLANK          BLANK ?                   03134001
001D2E 4780 8C90            01C90  3182          BE    SWTCHB3                                          03135001
001D32 952F 1000      00000        3183          CLI   0(R1),XFZETA           ZETA ?                    03136001
001D36 4770 8D42            01D42  3184          BNE   SWTCHNAA                                         03137001
001D3A 4190 8C94            01C94  3185          LA    R9,SWTCHB3+4                                     03138001
001D3E 47F0 5A28            00A28  3186          B     CIB                                              03139001
                                   3187 *                                                               03140001
001D42 4560 578A            0078A  3188 SWTCHNAA BAL   R6,ERR7                                          03141001
                                   3189 *                                                               03142001
001D46 0405                        3190          DC    X'0405'                E5                        03143001
                                   3191 *                                                               03144001
001D48 47F0 8D5E            01D5E  3192          B     SWTCHNBB                                         03145001
                                   3193 *                                                               03146001
001D4C 4560 56CC            006CC  3194 SWITCHER BAL   R6,ERR2                                          03147001
                                   3195 *                                                               03148001
001D50 0010                        3196          DC    X'0010'                E16                       03149001
                                   3197 *                                                               03150001
001D52 45C0 598C            0098C  3198          BAL   R12,COB                                          03151001
001D56 923D 3000      00000        3199          MVI   0(R3),X'3D'            MOVE IN RHA               03152001
001D5A 4130 3001            00001  3200          LA    R3,1(,R3)                                        03153001
001D5E 5860 DD68            00D68  3201 SWTCHNBB L     R6,AITL                CLEAR ITAB-ENTRY          03154001
001D62 9200 6000      00000        3202          MVI   0(R6),0                                          03155001
001D66 D209 6001 6000 00001 00000  3203          MVC   1(10,R6),0(R6)                                   03156001
001D6C 47F0 8324            01324  3204          B     COMERR                 COM-PRGM ERROR-ENTRY      03157001
                                   3205 *                                                               03158001
                                   3206 *        STRING                                                 03159001
                                   3207 *                                                               03160001
                                   3208 *        MOVES INTERNAL NAME TO OUTPUT                          03161001
                                   3209 *                                                               03162001
                                   3210 *        START ADDR IS IN PRPT THE STRINGS TWO FIRST BYTES      03163001
                                   3211 *        SPECIFIES ITS LENGTH THE TRT TESTS ONLY FOR APOSTROPHE 03164001
                                   3212 *        AND ZETA                                               03165001
                                   3213 *                                                               03166001
                                   3214 *        NOTE -                                                 03167001
                                   3215 *        THE STRING IS TAKEN FROM THE PRINT AREA (OR DUMMY) AND 03168001
                                   3216 *        MOVED TO KOPOOL TO CAPTURE THE STRING IN EBCDIC        03169001
                                   3217 *                                                               03170001
001D70 4100 3006            00006  3218 STRING   LA    R0,6(,R3)              PROVIDE 6 BYTES IN O/P    03171001
001D74 45C0 5982            00982  3219          BAL   R12,COBSPEC                                      03172001
001D78 D203 3000 8EDC 00000 01EDC  3220          MVC   0(4,R3),SINT           MOVE FIRST 4 BYTES OF INTERNAL  03173001
001D7E D201 3004 D0A6 00004 000A6  3221          MVC   4(2,R3),PRPT+2         NAME AND LAST TWO BYTES IN O/P  03174001
001D84 4130 3006            00006  3222          LA    R3,6(,R3)                                        03175001
001D88 58E0 D0A4            000A4  3223          L     R14,PRPT               GET CURRENT DISP WITHIN KOPOOL  03176001
001D8C 41E0 E002            00002  3224          LA    R14,2(,R14)            INCREASE FOR LEN SPECIFICATION  03177001
001D90 59E0 BD54            02D54  3225          C     R14,KF4095             STRING POOL OVERFLOW ?    03178001
001D94 47D0 8D9C            01D9C  3226          BNH   STRAAA                                           03179001
001D98 45C0 8EB2            01EB2  3227          BAL   R12,E23                                          03180001
001D9C 4110 1001            00001  3228 STRAAA   LA    R1,1(,R1)                                        03181001
001DA0 D203 8ED8 BD10 01ED8 02D10  3229          MVC   SQC,KF1                STRINQUOTE=1              03182001
001DA6 4190 8DA6            01DA6  3230 CDE2     LA    R9,*                   PROVIDE RETURN ADDR FOR CIB  03183001
001DAA 1841                        3231          LR    R4,R1                                            03184001
001DAC 1B22                        3232          SR    R2,R2                                            03185001
001DAE DD48 1000 BB90 00000 02B90  3233          TRT   0(73,R1),STRTABLE      SCAN STRING               03186001
001DB4 1871                        3234          LR    R7,R1                  COMPUTE NUMBER OF SCANNED BYTES  03187001
001DB6 1B74                        3235          SR    R7,R4                                            03188001
001DB8 4780 8DEE            01DEE  3236          BZ    SROUT                                            03189001
001DBC 4107 E000            00000  3237          LA    R0,0(R7,R14)           STRINGPOOL OVERFLOW ?     03190001
001DC0 5900 BD54            02D54  3238          C     R0,KF4095                                        03191001
001DC4 47D0 8DCC            01DCC  3239          BNH   STRBBB                                           03192001
001DC8 45C0 8EB2            01EB2  3240          BAL   R12,E23                                          03193001
001DCC 0670                        3241 STRBBB   BCTR  R7,0                   MOVE SCANNED BYTES TO KOPOOL  03194001
001DCE 5860 DD54            00D54  3242          L     R6,AKOPOOL                                       03195001
001DD2 41F6 E000            00000  3243          LA    R15,0(R6,R14)          COMPUTE NEW KOPOOL ADDR   03196001
001DD6 4100 DCF3            00CF3  3244          LA    R0,WA                  COMPUTE ADDR              03197001
001DDA 18C4                        3245          LR    R12,R4                 OF STRING IN              03198001
001DDC 1BC0                        3246          SR    R12,R0                 PRINT BUFFER              03199001
001DDE 5860 DD44            00D44  3247          L     R6,APRNTAR             R6 -> PRINT BUFFER        03200001
001DE2 41C6 C00A            0000A  3248          LA    R12,10(R6,R12)         GET STRING FROM PRINT BUFFER  03201001
001DE6 4470 8ECA            01ECA  3249          EX    R7,MV1                                           03202001
001DEA 41E7 E001            00001  3250          LA    R14,1(R7,R14)          INCREASE PRPT             03203001
001DEE 58C2 B6C4            026C4  3251 SROUT    L     R12,BPRTAB(R2)         BRANCH TO APPROPRIATE     03204001
001DF2 07FC                        3252          BR    R12                    SUBROUTINE                03205001
                                   3253 *                                                               03206001
                                   3254 *        QUOTE                                                  03207001
                                   3255 *                                                               03208001
                                   3256 *        CHECKS IF THE APOSTROPHE IS THE START OF A QUOTE SIGN  03209001
                                   3257 *                                                               03210001
                                   3258 *        USES REPL TO MOVE THE FOUND CHARACTER(S) TO KOPOOL     03211001
                                   3259 *        REPL+1 WILL BE A LEFT OR RIGHT PARENTHESIS             03212001
                                   3260 *        HOW MUCH OF REPL THAT IS TO BE MOVED TO KOPOOL IS KEPT 03213001
                                   3261 *        TRACK OF IN R7                                         03214001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12

                                   3262 *        IF A COMPLETE LEFT STRING QUOTE IS FOUND THE STRING                 03215001
                                   3263 *        QUOTE COUNTER IS INCREASED AND THE REPL MOVED TO                    03216001
                                   3264 *        KOPOOL                                                              03217001
                                   3265 *        IF A COMPLETE RIGHT STRING QUOTE IS FOUND IT IS CHECKED             03218001
                                   3266 *        IF IT IS THE CLOSING ONE FOR THE STRING (SQC=0) IF IT               03219001
                                   3267 *        IS ENDSTRING IS ACTIVATED IF NOT REPL IS MOVED TO KOPOOL            03220001
                                   3268 *        AFTER SQC IS DECREASED                                              03221001
                                   3269 *        IF NO COMPLETE QUOTE IS FOUND THE CHARACTER(S) FOUND                03222001
                                   3270 *        ARE MOVED TO KOPOOL FROM REPL, LENGTH SPECIFIED BY R7               03223001
                                   3271 *        AND THE SCANNING OF THE STRING IS REASSUMED                         03224001
                                   3272 *                                                                            03225001
001DF4 4110 1001            00001  3273 QUOTE    LA    R1,1(,R1)                                                     03226001
001DF8 4190 8DFC            01DFC  3274          LA    R9,*+4                                                        03227001
001DFC 9526 1000      00000        3275          CLI   0(R1),XFRBRAC             RIGHT BRACKET IN SOURCE ?           03228001
001E00 4770 8E0C            01E0C  3276          BNE   NORIP                     NO, BRANCH                          03229001
001E04 925D 8EE1      01EE1        3277          MVI   REPL+1,C')'               MAKE REPL A RIGHT STRING QUOTE      03230001
001E08 47F0 8E2C            01E2C  3278          B     TESTAPOS                  LOOK FOR APOSTROPHE                 03231001
                                   3279 *                                                                            03232001
001E0C 9506 1000      00000        3280 NORIP    CLI   0(R1),XFLBRAC             LEFT BRACKET ?                      03233001
001E10 4770 8E1C            01E1C  3281          BNE   TESTZETA                  NO                                  03234001
001E14 924D 8EE1      01EE1        3282          MVI   REPL+1,C'('               MAKE REPL A LEFT STRING QUOTE       03235001
001E18 47F0 8E2C            01E2C  3283          B     TESTAPOS                  LOOK FOR APOSTROPHE                 03236001
                                   3284 *                                                                            03237001
001E1C 952F 1000      00000        3285 TESTZETA CLI   0(R1),XFZETA              ZETA ?                              03238001
001E20 4780 5A28            00A28  3286          BE    CIB                       YES                                 03239001
001E24 4170 0001            00001  3287          LA    R7,1                      NO MOVE STRING ONLY FIRST QUOTE     03240001
001E28 47F0 8E74            01E74  3288          B     CID1                      MOVE REPL                           03241001
                                   3289 *                                                                            03242001
001E2C 4110 1001            00001  3290 TESTAPOS LA    R1,1(,R1)                                                     03243001
001E30 4190 8E34            01E34  3291          LA    R9,*+4                    NEW RETURN FOR CIB                  03244001
001E34 952E 1000      00000        3292          CLI   0(R1),XFQUOTE             SECOND QUOTE ?                      03245001
001E38 4780 8E4C            01E4C  3293          BE    CID                       YES                                 03246001
001E3C 952F 1000      00000        3294          CLI   0(R1),XFZETA              ZETA                                03247001
001E40 4780 5A28            00A28  3295          BE    CIB                       YES                                 03248001
001E44 4170 0002            00002  3296          LA    R7,2                      NO, MOVE TO STRING ONLY FIRST       03249001
001E48 47F0 8E74            01E74  3297          B     CID1                      QUOTE AND THE BRACKET               03250001
                                   3298 *                                                                            03251001
001E4C 4110 1001            00001  3299 CID      LA    R1,1(,R1)                                                     03252001
001E50 58C0 8ED8            01ED8  3300          L     R12,SQC                                                       03253001
001E54 954D 8EE1      01EE1        3301          CLI   REPL+1,C'('               LEFT STRING QUOTE ?                 03254001
001E58 4770 8E64            01E64  3302          BNE   CIDAA                     NO                                  03255001
001E5C 41C0 C001            00001  3303          LA    R12,1(,R12)               YES, INCREASE STRING QUOTE COUNT    03256001
001E60 47F0 8E6C            01E6C  3304          B     CIDBB                                                         03257001
                                   3305 *                                                                            03258001
001E64 5BC0 BD10            02D10  3306 CIDAA    S     R12,KF1                   RIGHT QUOTE DECREASE QUOTE COUNT    03259001
001E68 47D0 8E9A            01E9A  3307          BNP   ENDSTRIN                  BRANCH IF LAST QUOTE                03260001
001E6C 50C0 8ED8            01ED8  3308 CIDBB    ST    R12,SQC                                                       03261001
001E70 4170 0003            00003  3309          LA    R7,3                                                          03262001
001E74 4107 E000            00000  3310 CID1     LA    R0,0(R7,R14)                                                  03263001
001E78 5900 BD54            02D54  3311          C     R0,KF4095                 STRING POOL OVERFLOW ?              03264001
001E7C 47D0 8E84            01E84  3312          BNH   CIDCC                                                         03265001
001E80 45C0 8EB2            01EB2  3313          BAL   R12,E23                                                       03266001
001E84 5860 DD54            00D54  3314 CIDCC    L     R6,AKOPOOL                                                    03267001
001E88 4166 E000            00000  3315          LA    R6,0(R6,R14)              COMPUTE NEW KOPOOL ADDR             03268001
001E8C 0670                        3316          BCTR  R7,0                                                          03269001
001E8E 4470 8ED0            01ED0  3317          EX    R7,MV2                    MOVE CONTENTS OF REPL TO KOPOOL     03270001
001E92 41E7 E001            00001  3318          LA    R14,1(R7,R14)             INCREASE PRPT                       03271001
001E96 47F0 8DA6            01DA6  3319          B     CDE2                      RESUME SCAN OF STRING               03272001
                                   3320 *                                                                            03273001
                                   3321 *        ENDSTRIN                                                            03274001
                                   3322 *                                                                            03275001
                                   3323 *        INCREASES PRPT                                                      03276001
                                   3324 *        PUTS THE LENGTH OF THE STRING (DIFFERENCE BETWEEN NEW               03277001
                                   3325 *        AND OLD PRPT) AS TWO FIRST BYTES IN THE STRING                      03278001
                                   3326 *                                                                            03279001
001E9A 5890 D0A4            000A4  3327 ENDSTRIN L     R9,PRPT                   COMPUTE LENGTH AND PUT IT           03280001
001E9E 40E0 D0A6            000A6  3328          STH   R14,PRPT+2                AS THE FIRST 2 BYTES IN STRING      03281001
001EA2 5860 DD54            00D54  3329          L     R6,AKOPOOL                AND                                 03282001
001EA6 41C6 9000            00000  3330          LA    R12,0(R6,R9)              STORE NEW DISPLACEMENT              03283001
001EAA 1BE9                        3331          SR    R14,R9                    IN PRPT                             03284001
001EAC BEE3 C000            00000  3332          STCM  R14,B'0011',0(R12)                                            03285001
001EB0 07FA                        3333          BR    R10                       RETURN TO TESTLOOP                  03286001
                                   3334 *                                                                            03287001
001EB2 4700 8EBC            01EBC  3335 E23      NOP   E23AA                     NO BRANCH FIRST TIME                03288001
001EB6 4560 578A            0078A  3336          BAL   R6,ERR7                   RECORD ERROR                        03289001
                                   3337 *                                                                            03290001
001EBA 0417                        3338          DC    X'0417'                   E23                                 03291001
                                   3339 *                                                                            03292001
001EBC 96F0 8EB3      01EB3        3340 E23AA    OI    E23+1,X'F0'               NO ERROR RECORDING NEXT             03293001
001EC0 41E0 0040            00040  3341          LA    R14,64                                                        03294001
001EC4 50E0 D0A4            000A4  3342          ST    R14,PRPT                  RESET PRPT TO 64 AGAIN              03295001
001EC8 07FC                        3343          BR    R12                       RESUME STRING PROCESSING            03296001
                                   3344 *                                                                            03297001
001ECA D200 F000 C000 00000 00000  3345 MV1      MVC   0(1,R15),0(R12)                                               03298001
001ED0 D200 6000 8EE0 00000 01EE0  3346 MV2      MVC   0(1,R6),REPL                                                  03299001
                                   3347 *                                                                            03300001
001ED6 0000
001ED8 00000000                    3348 SQC      DC    F'0'                      STRING QUOTE COUNTER (AFTER MV2     03301001
001EDC 2EC90000                    3349 SINT     DC    X'2EC90000'               STRING INTERNAL NAME OF             03302001
                                   3350 *                                        THE CONSTANT POOL NAMED KOPOOL      03303001
001EE0 7D407D                      3351 REPL     DC    C''' '''                  BUCKET TO BUILD STRING QUOTES       03304001
                                   3352 *                                                                            03305001
                                   3353 *        TYPPROC                                                             03306001
                                   3354 *                                                                            03307001
                                   3355 *        TEST PRO AND BEGBIT (FORMAL PARAMETER, BLOCKSTART)                  03308001
                                   3356 *        MOVE PHI TO OUTPUT                                                  03309001
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                                     3357 *        INSERT CHARACTERISTICS IN INTERNAL NAME                          03310001
                                     3358 *        JOIN PROCEDURE PROGRAM                                           03311001
                                     3359 *                                                                         03312001
001EE3 00
001EE4 9140 DD8E      00D8E          3360 TYPPROC  TM    BITS1,X'40'          PROCEDURE PROCEDED ?                03313001
001EE8 4780 8EF8            01EF8    3361          BZ    TYPPROCA             NO                                  03314001
001EEC 92CA DCB8      00CB8          3362          MVI   KB,X'CA'             YES, MOVE IN IDFIELD                03315001
001EF0 96C0 DCB9      00CB9          3363          OI    KB+1,X'C0'                                               03316001
001EF4 47F0 86AE            016AE    3364          B     IDCHECK                                                  03317001
                                     3365 *                                                                         03318001
001EF8 9180 DD8E      00D8E          3366 TYPPROCA TM    BITS1,X'80'          BEGBIT ON ?                         03319001
001EFC 4780 8F0C            01F0C    3367          BZ    TYPPROCB             NO                                  03320001
001F00 5090 BDC8            02DC8    3368          ST    R9,SAVE1                                                 03321001
001F04 4590 5DCC            00DCC    3369          BAL   R9,BEG1              GOTO PROCESS PROGRAM BLOCK HEAD     03322001
001F08 5890 BDC8            02DC8    3370          L     R9,SAVE1                                                 03323001
001F0C 4100 3004            00004    3371 TYPPROCB LA    R0,4(,R3)            PROVIDE FOUR BYTES IN OUTPUT        03324001
001F10 45C0 5982            00982    3372          BAL   R12,COBSPEC          CHECK IF ENOUGH SPACE IN O/P        03325001
001F14 920F 3000      00000          3373          MVI   0(R3),X'0F'          MOVE PHI TO O/P                     03326001
001F18 58F0 DD68            00D68    3374          L     R15,AITL                                                 03327001
001F1C 97F0 F007      00007          3375          XI    7(R15),X'F0'         MOVE IN THE IDCODE                  03328001
001F20 92CA F006      00006          3376          MVI   6(R15),X'CA'         TO ITAB                             03329001
001F24 47F0 8F5C            01F5C    3377          B     PROCEAG1             JOIN THE PROCEDURE PROGRAM          03330001
                                     3378 *                                                                         03331001
                                     3379 *        PROCEDURE                                                        03332001
                                     3380 *                                                                         03333001
                                     3381 *        TEST PRO AND BEGBIT                                              03334001
                                     3382 *        MOVE PI TO OUTPUT                                                03335001
                                     3383 *        INSERT CHARACTERISTICS IN INTERNAL NAME                          03336001
                                     3384 *        TYPE PROCEDURE JOINS PROCEDURE PROGRAM AT THIS POINT             03337001
                                     3385 *        IF ALPHA IN STACK, PRECOMPILED PROCEDURE, THE STARTBIT           03338001
                                     3386 *        IS TURNED ON.                                                    03339001
                                     3387 *        PROC IS PUT IN STACK.                                            03340001
                                     3388 *        PROGRAM BLOCK AND ITAB GROUP NUMBER ARE INCREASED.               03341001
                                     3389 *        THE NEW PBN IS INSERTED IN THE INTERNAL NAME.                    03342001
                                     3390 *        LABELNUMBER IS INCREASED AND INSERTED IN THE INTERNAL            03343001
                                     3391 *        NAME.                                                            03344001
                                     3392 *        THE SURRONDING BLOCKNUMBET IS ENTERED IN PBTAB1.                 03345001
                                     3393 *        THE SURROUNDING ITAB GROUP NUMBER IN GROUPTABLE                  03346001
                                     3394 *        SEMCNT IS ENTERED IN SCTAB                                       03347001
                                     3395 *        PROBIT AND IDBIT ARE SET TO ONE                                  03348001
                                     3396 *        PROBIT WILL STAY AS ONE TILL THE WHOLE PROCEDURE HEAD            03349001
                                     3397 *        IS PROCESSED. THE IDBIT IS ONLY ONE WHILE THE PROCEDURE          03350001
                                     3398 *        NAME IS PROCESSED                                                03351001
                                     3399 *        THE FM (FORMAL PARAMETER) BIT IS ONE WHEN THE FORMAL             03352001
                                     3400 *        PARAMETER LIST IS PROCESSED                                      03353001
                                     3401 *        THE ITAB GROUP NUMBER IS MOVED TO O/P                            03354001
                                     3402 *                                                                         03355001
001F28 9140 DD8E      00D8E          3403 PROCEDUR TM    BITS1,X'40'          PROBIT ON ?                         03356001
001F2C 4710 86A4            016A4    3404          BO    SPECENT              YES, GOTO IDCHECK VIA SPECENT       03357001
001F30 9180 DD8E      00D8E          3405          TM    BITS1,X'80'          BEGBIT ON ?                         03358001
001F34 4780 8F44            01F44    3406          BZ    PROCEDAA             NO                                  03359001
001F38 5090 BDC8            02DC8    3407          ST    R9,SAVE1                                                 03360001
001F3C 4590 5DCC            00DCC    3408          BAL   R9,BEG1              GOTO PROCESS PROGRAM BLOCK HEAD     03361001
001F40 5890 BDC8            02DC8    3409          L     R9,SAVE1                                                 03362001
001F44 4100 3004            00004    3410 PROCEDAA LA    R0,4(,R3)            PROVIDE FOUR BYTES IN OUTPUT        03363001
001F48 45C0 5982            00982    3411          BAL   R12,COBSPEC                                              03364001
001F4C 920E 3000      00000          3412          MVI   0(R3),X'0E'          TRANSFER PI IN OUTPUT BUFFER        03365001
001F50 58F0 DD68            00D68    3413          L     R15,AITL                                                 03366001
001F54 92CA F006      00006          3414          MVI   6(R15),X'CA'         CONSTRUCT FIRST PART                03367001
001F58 92C0 F007      00007          3415          MVI   7(R15),X'C0'         INTERNAL NAME ?                     03368001
001F5C 58E0 DCD8            00CD8    3416 PROCEAG1 L     R14,SP                                                   03369001
001F60 9500 E000      00000          3417          CLI   0(R14),0             ALPHA IN STACK ?                    03370001
001F64 4770 8F70            01F70    3418          BNE   L3                                                       03371001
001F68 9620 DD8F      00D8F          3419          OI    BITS2,X'20'          TURN ON THE STARTBIT                03372001
001F6C 9608 DD90      00D90          3420          OI    BITS3,PROCESD                                            03373001
001F70 41E0 E001            00001    3421 L3       LA    R14,1(,R14)          INCREASE STACK POINTER              03374001
001F74 59E0 DD48            00D48    3422          C     R14,ATOPSTAK         STACK OVERFLOW ?                    03375001
001F78 4740 8F82            01F82    3423          BL    L3AA                 NO, BYPASS ERROR                    03376001
001F7C 4560 5724            00724    3424          BAL   R6,ERR4                                                  03377001
                                     3425 *                                                                         03378001
001F80 0414                          3426          DC    X'0414'              E20                                 03379001
                                     3427 *                                                                         03380001
001F82 920C E000      00000          3428 L3AA     MVI   0(R14),X'0C'         PUT PROC IN STACK                   03381001
001F86 50E0 DCD8            00CD8    3429          ST    R14,SP                                                   03382001
001F8A 95FF DD84      00D84          3430          CLI   PBC,X'FF'            PBN OVERFLOW ?                      03383001
001F8E 4770 8F98            01F98    3431          BNE   L3BB                 NO                                  03384001
001F92 4560 5724            00724    3432          BAL   R6,ERR4                                                  03385001
                                     3433 *                                                                         03386001
001F96 0416                          3434          DC    X'0416'              E22                                 03387001
                                     3435 *                                                                         03388001
001F98 4320 DD84            00D84    3436 L3BB     IC    R2,PBC                                                   03389001
001F9C 4120 2001            00001    3437          LA    R2,1(,R2)            INCR PROGRAM BLOCK NUMBER           03390001
001FA0 4220 F008            00008    3438          STC   R2,8(,R15)           INSERT PBN IN INTERVAL NAME         03391001
001FA4 4220 DD84            00D84    3439          STC   R2,PBC                                                   03392001
001FA8 41E2 D478            00478    3440          LA    R14,PBTAB1(R2)       CONSTRUCTION                        03393001
001FAC 5860 DD70            00D70    3441          L     R6,LPBP              PBTAB1-ENTRY                        03394001
001FB0 D200 E000 600A 00000 0000A    3442          MVC   0(1,R14),10(R6)                                          03395001
001FB6 1A22                          3443          AR    R2,R2                                                    03396001
001FB8 41E2 8126            01126    3444          LA    R14,SCTAB(R2)                                            03397001
001FBC D201 E000 D09C 00000 0009C    3445          MVC   0(2,R14),SEMCNT      MAKE ENTRY IN SCTAB                 03398001
001FC2 48E0 D0A2            000A2    3446          LH    R14,LN               INCREASE                            03399001
001FC6 41E0 E004            00004    3447          LA    R14,4(,R14)          LABEL NUMBER BY 4                   03400001
001FCA D501 D0A2 BD58 000A2 02D58    3448          CLC   LN(2),KH4096         LN OVERFLOW ?                       03401001
001FD0 4740 8FDE            01FDE    3449          BL    L3CC                                                     03402001
001FD4 4560 578A            0078A    3450          BAL   R6,ERR7                                                  03403001
                                     3451 *                                                                         03404001
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  Active USINGs: WORKAREA,R13  IEX11000,R5,R8,R11

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.12

001FD8 04D8                          3452         DC    X'04D8'                 E216                            03405001
                                     3453 *                                                                     03406001
001FDA 41E0 006C              0006C  3454         LA    R14,LATBEG              RESET LN                        03407001
001FDE 40E0 D0A2              000A2  3455 L3CC    STH   R14,LN                                                  03408001
001FE2 58F0 DD68              00D68  3456         L     R15,AITL                                                03409001
001FE6 D201 F009 D0A2 00009 000A2    3457         MVC   9(2,R15),LN             PUT LN IN INTERNAL NAME         03410001
001FEC 48F0 DD4C              00D4C  3458         LH    R15,IGC                 INCREASE                        03411001
001FF0 41F0 F001              00001  3459         LA    R15,1(,R15)             ITAB GROUP NUMBER               03412001
001FF4 40F0 DD4C              00D4C  3460         STH   R15,IGC                                                 03413001
001FF8 D201 3001 DD4C 00001 00D4C    3461         MVC   1(2,R3),IGC             INSERT IT IN OUTPUT BUFFER      03414001
001FFE 4130 3003              00003  3462         LA    R3,3(,R3)                                               03415001
002002 1AFF                          3463         AR    R15,R15                                                 03416001
002004 4AF0 DD4C              00D4C  3464         AH    R15,IGC                                                 03417001
002008 5AF0 DD50              00D50  3465         A     R15,AGT                                                 03418001
00200C 5870 DD6C              00D6C  3466         L     R7,LIGP                                                 03419001
002010 D201 F000 7008 00000 00008    3467         MVC   0(2,R15),8(R7)          CONSTRACT ENTRY                 03420001
002016 9200 F002        00002        3468         MVI   2(R15),0                IN GROUP TABLE                  03421001
00201A 947F F000        00000        3469         NI    0(R15),X'7F'            CLEAR POSSIBLE PHI IND.         03422001
00201E D203 DD60 BD0C 00D60 02D0C    3470         MVC   PRIMPAR(4),KF0          CLEAR PRIMPAR WITH ZEROS        03423001
002024 9650 DD8E        00D8E        3471         OI    BITS1,X'50'             PROBIT =1,IDBIT =1              03424001
002028 9200 DD8D        00D8D        3472         MVI   PZ,0                    SET PARAMTER COUNT TO ZERO      03425001
                                     3473 *                                                                     03426001
                                     3474 *       PROCID                                                        03427001
                                     3475 *                                                                     03428001
                                     3476 *       PROCESSES PROCEDURE NAME (IDBIT=1) AND THE FORMAL             03429001
                                     3477 *       PARAMETER LIST (IDBIT=0).                                     03430001
                                     3478 *       CHECKS THE NAMES FOR VALIDITY AND MOVES THEM TO ITAB          03431001
                                     3479 *       AND OUTPUT. THIS IS DONE VIA IDCHECK1.                        03432001
                                     3480 *                                                                     03433001
00202C 4110 1001              00001  3481 PROCID  LA    R1,1(,R1)                                               03434001
002030 9540 1000        00000        3482         CLI   0(R1),XFA               IDENTIFIER STARTS WITH LETTER ? 03435001
002034 4740 B10C              0210C  3483         BL    NOLETTER                                                03436001
002038 4560 58B4              008B4  3484         BAL   R6,IDCHECK1             CHECK AND MOVE IDENTIFIER       03437001
                                     3485 *                                     TO O/P AND ITAB                 03438001
00203C 952B 1000        00000        3486         CLI   0(R1),XFBLANK           BLANK ?                         03439001
002040 4780 58D8              008D8  3487         BE    IDCHECK2                                                03440001
002044 9110 DD8E        00D8E        3488         TM    BITS1,X'10'             IDBIT ONE ?                     03441001
002048 4780 B186              02186  3489         BZ    EDA1                    GOTO PROCESS FORMAL PARAM NAME  03442001
                                     3490 *                                                                     03443001
                                     3491 *       PROCEDURE NAME                                                03444001
                                     3492 *                                                                     03445001
                                     3493 *       CHECKS IF NAME IS FOLLOWED BY A FORMAL PARAMETER LIST         03446001
                                     3494 *       FOLLOWS OR ; NO PARAMETERS.                                   03447001
                                     3495 *       CHECKS IF PROCEDURE IS TO BE PRECOMPILED, IF YES THE          03448001
                                     3496 *       NAME IN EXTERNAL FORM AND EXPANDED WITH TWO ZEROS IS PUT      03449001
                                     3497 *       FOR AN ESDCARD IF SYLIN OR DECK HAS BEEN SPECIFIED            03450001
                                     3498 *       THE NEW BLOCK ENTRY IS DONE IN ITAB                           03451001
                                     3499 *       ADDR OF SURROUNDING BLOCK AND ITAB GROUP, PBN AND IGN         03452001
                                     3500 *       ARE INSERTED                                                  03453001
                                     3501 *       IF TYPEPROCEDURE, BIT 0 IN BYTE 8 IS TURNED ON AND A          03454001
                                     3502 *       SECOND ENTRY OF THE NAME IS DONE AFTER THE HEAD ENTRY         03455001
                                     3503 *       IDBIT IS SET TO ZERO, FMBIT TO ONE                            03456001
                                     3504 *       IF THE NAME WAS FOLLOWED BY A SEMICOLON THE SEMCO IS          03457001
                                     3505 *       ACTIVATED                                                     03458001
                                     3506 *       IF THE NAME WAS FOLLOWED BY A (PROCID IS ACTIVATED TO         03459001
                                     3507 *       PROCESS THE NAME IN THE LIST                                  03460001
                                     3508 *                                                                     03461001
00204C 9506 1000        00000        3509         CLI   0(R1),XFLBRAC           IDENTIFIER FOLLOWED BY ) ?      03462001
002050 4780 B060              02060  3510         BE    EBF4                                                    03463001
002054 4160 B130              02130  3511         LA    R6,ERROR16              RETURN IF NOT SEMICOLON         03464001
002058 45C0 5912              00912  3512         BAL   R12,FINDSEMC            SEMICOLON ?                     03465001
00205C 9620 DD8E        00D8E        3513         OI    BITS1,X'20'             YES, DELTABIT = 1               03466001
002060 9108 DD90        00D90        3514 EBF4    TM    BITS3,PROCESD                                           03467001
002064 4780 B084              02084  3515         BZ    DEL1                    NO                              03468001
002068 94F7 DD90        00D90        3516         NI    BITS3,PROCOFF                                           03469001
00206C 9160 D081        00081        3517         TM    COMPFLGS+1,NLOAD+NDECK  DECK AND OR LOAD SPECIFIED ?    03470001
002070 4710 B084              02084  3518         BO    DEL1                    NO, NO NEED FOR ESD CARD        03471001
002074 58F0 DD68              00D68  3519         L     R15,AITL                                                03472001
002078 D205 BD84 F000 02D84 00000    3520         MVC   ESDNAME(6),0(R15)       MOVE IN AND                     03473001
00207E DC05 BD84 B92E 02D84 0292E    3521         TR    ESDNAME(6),TRINTEXT     TRANSLATE EXTERNAL NAME         03474001
002084 9120 DD8E        00D8E        3522 DEL1    TM    BITS1,X'20'             DELTABIT = 1 ?                  03475001
002088 4710 B098              02098  3523         BO    ECA3                                                    03476001
00208C 45C0 598C              0098C  3524         BAL   R12,COB                 CHECK IF O/P AREA FILLED        03477001
002090 9206 3000        00000        3525         MVI   0(R3),XFLBRAC           INSERT )                        03478001
002094 4130 3001              00001  3526         LA    R3,1(,R3)                                               03479001
002098 45C0 595A              0095A  3527 ECA3    BAL   R12,ITABCLEA                                            03480001
00209C D203 F000 DD6C 00000 00D6C    3528         MVC   0(4,R15),LIGP           MOVE ADDR HEADING ENTRY OF      03481001
                                     3529 *                                     EMBRACING ITAB GROUP            03482001
0020A2 D203 F004 DD70 00004 00D70    3530         MVC   4(4,R15),LPBP           AND PBLOCK TO ENTRY             03483001
0020A8 D201 F008 DD4C 00008 00D4C    3531         MVC   8(2,R15),IGC            INSERT CURRENT IGN              03484001
0020AE D200 F00A DD84 0000A 00D84    3532         MVC   10(1,R15),PBC           AND CURRENT PBN                 03485001
0020B4 50F0 DD6C              00D6C  3533         ST    R15,LIGP                NEW VALUE OF LIGP               03486001
0020B8 50F0 DD70              00D70  3534         ST    R15,LPBP                AND LPBP                        03487001
0020BC 5BF0 BD38              02D38  3535         S     R15,KF11                DECREASE R15 BY 11              03488001
0020C0 9103 F007        00007        3536         TM    7(R15),X'03'            TYPE PROCEDURE ?                03489001
0020C4 4770 B0E4              020E4  3537         BNZ   TPROHEAD                                                03490001
0020C8 41F0 F016              00016  3538         LA    R15,22(,R15)            IF NO INCREASE ITAB POINTER     03491001
0020CC 45C0 5962              00962  3539 ECJ3    BAL   R12,ITABCLEC                                            03492001
0020D0 9640 DD90        00D90        3540         OI    BITS3,FMBIT             FMBIT                           03493001
0020D4 9120 DD8E        00D8E        3541         TM    BITS1,X'20'             DELTABIT = 1 ?                  03494001
0020D8 4710 55D4              005D4  3542         BO    SEMCO                   YES, BRANCH TO SEMICOLON PROGRAM 03495001
0020DC 94EF DD8E        00D8E        3543         NI    BITS1,X'EF'             IDBIT'= 0                       03496001
0020E0 47F0 B02C              0202C  3544         B     PROCID                  CHECK NEXT IDENTIFIER           03497001
                                     3545 *                                                                     03498001
                                     3546 *       CONSTRUCT TYPE PROCEDURE ENTRIES                              03499001
                                     3547 *                                                                     03500001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

0020E4 9680 F013       00013        3548 TPROHEAD OI    19(R15),X'80'      FLAGBIT IN IGN IS SET ON         03501001
0020E8 4100 F016             00016  3549          LA    R0,22(,R15)        ONE MORE ENTRY IN ITAB AVAIL     03502001
0020EC 5900 DCC8             00CC8  3550          C     R0,ELI                                              03503001
0020F0 4770 B0FA             020FA  3551          BNE   TPROHEAA                                            03504001
0020F4 4560 5724             00724  3552          BAL   R6,ERR4                                             03505001
                                    3553 *                                                                  03506001
0020F8 04D5                         3554          DC    X'04D5'            E213                             03507001
                                    3555 *                                                                  03508001
0020FA D20A F016 F000 00016 00000  3556 TPROHEAA MVC   22(11,R15),0(R15)  ENTER PROCEDURE NAME ONCE MORE   03509001
002100 9708 F01C       0001C        3557          XI    28(R15),X'08'      NO-ASSIGNMENTBIT IS SWITCHED OFF 03510001
002104 41F0 F021             00021  3558          LA    R15,33(,R15)       INCREASE ITAB POINTER            03511001
002108 47F0 B0CC             020CC  3559          B     ECJ3               BRANCH BACK TO MAIN PROGRAM      03512001
                                    3560 *                                                                  03513001
00210C 952B 1000       00000        3561 NOLETTER CLI   0(R1),XFBLANK      BLANK INSTEAD OF LETTER ?        03514001
002110 4780 B02C             0202C  3562          BE    PROCID                                              03515001
002114 4190 B030             02030  3563          LA    R9,PROCID+4                                         03516001
002118 952F 1000       00000        3564          CLI   0(R1),XFZETA       ZETA ?                           03517001
00211C 4780 5A28             00A28  3565          BE    CIB                CHANGE INPUT BUFFER              03518001
002120 9110 DD8E       00D8E        3566          TM    BITS1,X'10'                                         03519001
002124 4710 B14C             0214C  3567          BO    ERROR16A                                            03520001
002128 41F0 B02C             0202C  3568          LA    R15,PROCID         LOAD RETURN ADDR                 03521001
00212C 47F0 8588             01588  3569          B     IERSPEC            BRANCH TO IDENTIFIER ERROR RTN   03522001
                                    3570 *                                                                  03523001
002130 45C0 598C             0098C  3571 ERROR16  BAL   R12,COB                                             03524001
002134 923D 3000       00000        3572          MVI   0(R3),X'3D'        MOVE IN RHA                      03525001
002138 4130 3001             00001  3573          LA    R3,1(,R3)                                           03526001
00213C 9110 DD8E       00D8E        3574          TM    BITS1,X'10'        PROC NAME UNDER PROCESS ?        03527001
002140 4710 B156             02156  3575          BO    PNAMERR            YES                              03528001
002144 41F0 B02C             0202C  3576          LA    R15,PROCID         LOAD RETURN ADDR                 03529001
002148 47F0 8592             01592  3577          B     IER                GO TO IDENTIFIER ERROR ROUTINE   03530001
                                    3578 *                                                                  03531001
00214C 4560 578A             0078A  3579 ERROR16A BAL   R6,ERR7                                             03532001
                                    3580 *                                                                  03533001
002150 0405                         3581          DC    X'0405'            E5                               03534001
                                    3582 *                                                                  03535001
002152 47F0 B15C             0215C  3583          B     PNAMERRA                                            03536001
                                    3584 *                                                                  03537001
002156 4560 56CC             006CC  3585 PNAMERR  BAL   R6,ERR2                                             03538001
                                    3586 *                                                                  03539001
00215A 0010                         3587          DC    X'0010'            E16                              03540001
                                    3588 *                                                                  03541001
00215C 5870 DD68             00D68  3589 PNAMERRA L     R7,AITL                                             03542001
002160 9200 7000       00000        3590          MVI   0(R7),0            CLEAR ERRONEOUS NAME             03543001
002164 D204 7001 7000 00001 00000  3591          MVC   1(5,R7),0(R7)                                       03544001
00216A 4160 B176             02176  3592          LA    R6,PROCIDSE        THE PROCEDURE HEAD SHOULD        03545001
00216E 45C0 5912             00912  3593          BAL   R12,FINDSEMC       BE FOLLOWED BY EITHER  ( OR .,   03546001
002172 47F0 B05C             0205C  3594          B     EBF4-4                                              03547001
                                    3595 *                                                                  03548001
002176 9506 1000       00000        3596 PROCIDSE CLI   0(R1),X'06'        KEEP LOOPING UNTIL :-            03549001
00217A 4780 B060             02060  3597          BE    EBF4               LEFT PARENTHESIS FOUND           03550001
00217E 45C0 590E             0090E  3598          BAL   R12,FINDSEMC-4                                      03551001
002182 47F0 B05C             0205C  3599          B     EBF4-4             SEMICOLON FOUND                  03552001
                                    3600 *                                                                  03553001
                                    3601 *        FORMAL PARAMETER LIST                                     03554001
                                    3602 *                                                                  03555001
                                    3603 *        IF A COMMA TERMINATES THE NAME, THE COMMA IS TRANSFERED   03556001
                                    3604 *        TO OUTPUT AND THE PARAMETER COUNT (PZ) IS INCREASED BY    03557001
                                    3605 *        ONE. AND PROCID IS ACTIVATED AGAIN TO TAKE NEXT NAME.     03558001
                                    3606 *        IF A ) FOLLOWED BY A SEMICOLON TERMINATES THE NAME        03559001
                                    3607 *        PROCFIN IS ACTIVATED.                                     03560001
                                    3608 *        IF A ) BUT NO SEMICOLON TERMINATES THE NAME PROCDEL IS    03561001
                                    3609 *        ACTIVATED.                                                03562001
                                    3610 *        IS SOMETHING ELSE IS FOUND RHA IS MOVED TO OUTPUT, THE    03563001
                                    3611 *        PARAMETER COUNT IS NOT INCREASED AND IER ACTIVATED        03564001
                                    3612 *        (NOLETTER, ERROR16).                                      03565001
                                    3613 *                                                                  03566001
002186 9525 1000       00000        3614 EDA1     CLI   0(R1),XFCOMMA      COMMA TERMINATES IDENTIFIER ?    03567001
00218A 4770 B1B6             021B6  3615          BNE   PAR                                                 03568001
00218E 4320 DD8D             00D8D  3616 PROCEND  IC    R2,PZ              INCREASE                         03569001
002192 4120 2001             00001  3617          LA    R2,1(,R2)          PARAMETER                        03570001
002196 4220 DD8D             00D8D  3618          STC   R2,PZ              COUNT BY ONE                     03571001
00219A 45C0 595A             0095A  3619          BAL   R12,ITABCLEA       CHECK AND CLEAR NEXT ITABENTRY   03572001
00219E 45C0 598C             0098C  3620          BAL   R12,COB            CHECK IF O/P AREA FILLED         03573001
0021A2 9525 1000       00000        3621          CLI   0(R1),XFCOMMA      COMMA ?                          03574001
0021A6 4770 B1D2             021D2  3622          BNE   PROCFIN                                             03575001
0021AA 9225 3000       00000        3623          MVI   0(R3),XFCOMMA      MOVE COMMA TO OUTPUT BUFFER      03576001
0021AE 4130 3001             00001  3624          LA    R3,1(,R3)          INCREASE OUTPUT POINTER          03577001
0021B2 47F0 B02C             0202C  3625          B     PROCID             BRANCH TO CHECK THE              03578001
                                    3626 *                                 NEXT IDENTIFIER                  03579001
0021B6 9526 1000       00000        3627 PAR      CLI   0(R1),XFRBRAC      ) TERMINATES IDENTIFIER ?        03580001
0021BA 4780 B18E             0218E  3628          BE    PROCEND                                             03581001
0021BE 45C0 598C             0098C  3629          BAL   R12,COB                                             03582001
0021C2 923D 3000       00000        3630          MVI   0(R3),X'3D'        MOVE IN RHA                      03583001
0021C6 4130 3001             00001  3631          LA    R3,1(,R3)                                           03584001
0021CA 41F0 B02C             0202C  3632          LA    R15,PROCID         NOTE RETURN ADDR                 03585001
0021CE 47F0 8592             01592  3633          B     IER                BRANCH TO IER                    03586001
                                    3634 *                                                                  03587001
                                    3635 *        PROCFIN                                                   03588001
                                    3636 *                                                                  03589001
                                    3637 *        THE PARAMETER LIST HAS BEEN COMPLETLY CHECKED             03590001
                                    3638 *        THE RIGHT PARENTHESIS IS MOVED TO OUTPUT                  03591001
                                    3639 *        DELTABIT IS SET TO ONE                                    03592001
                                    3640 *        THE PARENTHESIS COUNT IS INSERTED IN THE PROCEDURE NAME   03593001
                                    3641 *        (NAMES IF TYPEPROCEDURE)                                  03594001
                                    3642 *        FMBIT IS TURNED OFF                                       03595001
                                    3643 *        THE RETURN TO TEST IS VIA SEMCO                           03596001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12

                                   3644 *        IF SOMETHING ELSE, E5 OR E16 IS GENERATED AND                     03597001
                                   3645 *        EVERYTHING SKIPPED TILL A (OR A; IS FOUND (NOLETTER,              03598001
                                   3646 *        PNAMERR)                                                          03599001
                                   3647 *                                                                          03600001
0021D2 4110 1001            00001  3648 PROCFIN  LA    R1,1(,R1)                                                   03601001
0021D6 4160 B252            02252  3649          LA    R6,PROCDEL               RETURN IF NO SEMICOLON             03602001
0021DA 45C0 5912            00912  3650          BAL   R12,FINDSEMC             SEMICOLON ?                        03603001
0021DE 45C0 598C            0098C  3651          BAL   R12,COB                                                     03604001
0021E2 41E0 55D4            005D4  3652          LA    R14,SEMCO                EXIT FROM PROCEDUR                 03605001
0021E6 9226 3000      00000        3653 SCYES3   MVI   0(R3),XFRBRAC            MOVE RIGHT PARENTHESIS             03606001
0021EA 4130 3001            00001  3654          LA    R3,1(,R3)                                                   03607001
0021EE 9620 DD8E      00D8E        3655          OI    BITS1,X'20'              DELTABIT'=1                        03608001
0021F2 9510 DD8D      00D8D        3656          CLI   PZ,16                    MORE THAN 15 PARAMETERS ?          03609001
0021F6 4740 B204            02204  3657          BL    SCYES3A                                                     03610001
0021FA 4560 56D4            006D4  3658          BAL   R6,ERR2B                                                    03611001
                                   3659 *                                                                          03612001
0021FE 0024                        3660          DC    X'0024'                  E36                                03613001
                                   3661 *                                                                          03614001
002200 47F0 5728            00728  3662          B     COMPFIN                                                     03615001
                                   3663 *                                                                          03616001
002204 58F0 DD70            00D70  3664 SCYES3A  L     R15,LPBP                                                    03617001
002208 5BF0 BD38            02D38  3665          S     R15,KF11                 R15 CONTAINS ADDR OF PROC ENTRY    03618001
00220C 1B66                        3666          SR    R6,R6                                                       03619001
00220E 4360 DD8D            00D8D  3667          IC    R6,PZ                                                       03620001
002212 8B60 0004            00004  3668          SLA   R6,4(0)                                                     03621001
002216 4260 DD8D            00D8D  3669          STC   R6,PZ                                                       03622001
00221A D300 F009 DD8D 00009 00D8D  3670          MVZ   9(1,R15),PZ              INSERT NUMBER OF PARAMETERS INTO   03623001
                                   3671 *                                       INTERNAL NAME OF THE PROCEDURE     03624001
002220 8A60 0004            00004  3672          SRA   R6,4                                                        03625001
002224 4260 DD8D            00D8D  3673          STC   R6,PZ                    NOTE NUMBER OF PARAMETER           03626001
002228 94BF DD90      00D90        3674          NI    BITS3,FMOFF              FMBIT=0                            03627001
00222C 9180 F013      00013        3675          TM    19(R15),X'80'            TYPE PROCEDURE ?                   03628001
002230 4780 B242            02242  3676          BZ    TESTPAR                  NO                                 03629001
002234 D300 F01F F009 0001F 00009  3677          MVZ   31(1,R15),9(R15)         INSERT NUMBER OF PARAMETERS INTO   03630001
                                   3678 *                                       SECOND NAME ENTRY IN ITAB          03631001
00223A 41F0 F021            00021  3679          LA    R15,33(,R15)             GET ADDR OF FIRST PARAMETER        03632001
00223E 47F0 B246            02246  3680          B     TESTPARA                                                    03633001
                                   3681 *                                                                          03634001
002242 41F0 F016            00016  3682 TESTPAR  LA    R15,22(,R15)                                                03635001
002246 9500 DD8D      00D8D        3683 TESTPARA CLI   PZ,0                     ANY PARAMETERS ?                   03636001
00224A 078E                        3684          BER   R14                      NO, BRANCH TO SEMCO OR COMERR      03637001
00224C 50F0 DD60            00D60  3685          ST    R15,PRIMPAR              YES, SAVE ADDR OF FIRST            03638001
002250 07FE                        3686          BR    R14                      BRANCH TO SEMCO OR COMERR          03639001
                                   3687 *                                                                          03640001
                                   3688 *        PROCDEL                                                           03641001
                                   3689 *                                                                          03642001
                                   3690 *        A RIGHT PARENTHESIS HAS BEEN FOUND IN THE LIST THAT NOT           03643001
                                   3691 *        WAS FOLLOWED BY A .,                                              03644001
                                   3692 *        IF A LETTERSTRING IS FOUND, NOTHING BUT LETTERS AND               03645001
                                   3693 *        BLANKS FOLLOWED BY ..(A COMMA IS MOVED TO OUTPUT AND              03646001
                                   3694 *        PROCID ACTIVATED TO TAKE NEXT NAME.                               03647001
                                   3695 *        IF ANYTHING ELSE IS FOUND E37 IS GENERATED AND COMERR             03648001
                                   3696 *        ACTIVATED TO SKIP TO NEXT SEMICOLON                               03649001
                                   3697 *        ADDR OF COMERR IS PUT IN R14                                      03650001
                                   3698 *                                                                          03651001
002252 4190 B25A            0225A  3699 PROCDEL  LA    R9,DELCHECK+4                                               03652001
002256 4110 1001            00001  3700 DELCHECK LA    R1,1(,R1)                                                   03653001
00225A 9540 1000      00000        3701          CLI   0(R1),XFA                LETTER ?                           03654001
00225E 47B0 B256            02256  3702          BNL   DELCHECK                                                    03655001
002262 952F 1000      00000        3703          CLI   0(R1),XFZETA             ZETA ?                             03656001
002266 4780 5A28            00A28  3704          BE    CIB                                                         03657001
00226A 9507 1000      00000        3705          CLI   0(R1),XFCOLON            COLON ?                            03658001
00226E 4780 B2A6            022A6  3706          BE    DELCOLON                                                    03659001
002272 952B 1000      00000        3707          CLI   0(R1),XFBLANK                                               03660001
002276 4780 B256            02256  3708          BE    DELCHECK                                                    03661001
00227A 952D 1000      00000        3709          CLI   0(R1),XFPERIOD           PERIOD ?                           03662001
00227E 4770 B2E0            022E0  3710          BNE   ERROR37                                                     03663001
002282 4110 1001            00001  3711 DELPOINT LA    R1,1(,R1)                                                   03664001
002286 952D 1000      00000        3712          CLI   0(R1),XFPERIOD           ONE MORE PERIOD ?                  03665001
00228A 4780 B2A6            022A6  3713          BE    DELCOLON                                                    03666001
00228E 952B 1000      00000        3714          CLI   0(R1),XFBLANK                                               03667001
002292 4780 B282            02282  3715          BE    DELPOINT                                                    03668001
002296 952F 1000      00000        3716          CLI   0(R1),XFZETA             ZETA ?                             03669001
00229A 4770 B2E0            022E0  3717          BNE   ERROR37                                                     03670001
00229E 4190 B286            02286  3718          LA    R9,DELPOINT+4                                               03671001
0022A2 47F0 5A28            00A28  3719          B     CIB                                                         03672001
                                   3720 *                                                                          03673001
0022A6 4110 1001            00001  3721 DELCOLON LA    R1,1(,R1)                                                   03674001
0022AA 9506 1000      00000        3722          CLI   0(R1),XFLBRAC            LEFT BRACKET ?                     03675001
0022AE 4780 B2D0            022D0  3723          BE    DELPAREN                                                    03676001
0022B2 952B 1000      00000        3724          CLI   0(R1),XFBLANK            BLANK ?                            03677001
0022B6 4780 B2A6            022A6  3725          BE    DELCOLON                                                    03678001
0022BA 952F 1000      00000        3726          CLI   0(R1),XFZETA             ZETA ?                             03679001
0022BE 4770 B2CA            022CA  3727          BNE   DELCOLAA                                                    03680001
0022C2 4190 B2AA            022AA  3728          LA    R9,DELCOLON+4                                               03681001
0022C6 47F0 5A28            00A28  3729          B     CIB                                                         03682001
                                   3730 *                                                                          03683001
0022CA 0610                        3731 DELCOLAA BCTR  R1,0                     NO BRACKETS FOLLOWS THE COLON      03684001
0022CC 47F0 B2E0            022E0  3732          B     ERROR37                  RESET R1 AND GOTO ERROR 37         03685001
                                   3733 *                                                                          03686001
0022D0 45C0 598C            0098C  3734 DELPAREN BAL   R12,COB                                                     03687001
0022D4 9225 3000      00000        3735          MVI   0(R3),XFCOMMA            MOVE COMMA TO OUTPUT INSTEAD OF    03688001
0022D8 4130 3001            00001  3736          LA    R3,1(,R3)                DELIMITER INCREASE O/P POINTER     03689001
0022DC 47F0 B02C            0202C  3737          B     PROCID                   RETURN TO PROCEDURE CHECKING       03690001
                                   3738 *                                                                          03691001
0022E0 4560 56D4            006D4  3739 ERROR37  BAL   R6,ERR2B                                                    03692001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                   3740 *                                                               03693001
0022E4 0025                        3741          DC    X'0025'              E37                         03694001
                                   3742 *                                                               03695001
0022E6 41E0 8324            01324  3743          LA    R14,COMERR                                       03696001
0022EA 47F0 B1E6            021E6  3744          B     SCYES3                                           03697001
                                   3745 *                                                               03698001
                                   3746 *        ENDMISS                                                03699001
                                   3747 *                                                               03700001
                                   3748 *        ENTERED IF END OF DATA FOUND BEFORE LOGICAL            03701001
                                   3749 *        PROGRAM END IS FOUND BY SCAN I/II                      03702001
                                   3750 *        CLOSES WHAT REMAINS OPEN IN STACK                      03703001
                                   3751 *        GENERATES PATTERN FOR ERROR MESSAGE 39                 03704001
                                   3752 *                                                               03705001
0022EE 9120 DD8F      00D8F        3753 ENDMISS  TM    BITS2,STARTBIT       FIRST BEGIN FOUND ?         03706001
0022F2 4710 B2FC            022FC  3754          BO    ENDMISSA             YES                         03707001
0022F6 4560 5724            00724  3755          BAL   R6,ERR4                                          03708001
                                   3756 *                                                               03709001
0022FA 042C                        3757          DC    X'042C'              E44 NOTHING PROCESSED       03710001
                                   3758 *                                                               03711001
0022FC 9601 DD8E      00D8E        3759 ENDMISSA OI    BITS1,TERBIT                                     03712001
002300 4140 B300            02300  3760 TERMSEAC LA    R4,TERMSEAC          RETURN FOR PBLCKEND PROG    03713001
002304 58F0 DCD8            00CD8  3761          L     R15,SP               GET STACK POINTER           03714001
002308 9504 F000      00000        3762          CLI   0(R15),X'04'         BETA IN STACK ?             03715001
00230C 4780 B320            02320  3763          BE    STEPUP                                           03716001
002310 9508 F000      00000        3764          CLI   0(R15),X'08'         BEGIN ?                     03717001
002314 4780 B320            02320  3765          BE    STEPUP                                           03718001
002318 9510 F000      00000        3766          CLI   0(R15),X'10'         PROC* ?                     03719001
00231C 4770 B32C            0232C  3767          BNE   TERMBRNC                                         03720001
002320 4860 BD72            02D72  3768 STEPUP   LH    R6,ENDCOUNT          INCREASE END COUNT          03721001
002324 4160 6001            00001  3769          LA    R6,1(,R6)                                        03722001
002328 4060 BD72            02D72  3770          STH   R6,ENDCOUNT                                      03723001
00232C 4320 F000            00000  3771 TERMBRNC IC    R2,0(,R15)                                       03724001
002330 5862 B338            02338  3772          L     R6,TERMTAB(R2)       BRANCH ACORDING TO STACK BYTE 03725001
002334 07F6                        3773          BR    R6                                               03726001
                                   3774 *                                                               03727001
002336 0000
002338 00002392                    3775 TERMTAB  DC    A(ERROR39)           +00                         03728001
00233C 00000FB8                    3776          DC    A(PBLCKEND)          +04 BEGIN                   03729001
002340 00002354                    3777          DC    A(TERMBGN)           +08 BETA                    03730001
002344 00000FB8                    3778          DC    A(PBLCKEND)          +12 PROC                    03731001
002348 00000FB8                    3779          DC    A(PBLCKEND)          +16 PROC*                   03732001
00234C 00000FB8                    3780          DC    A(PBLCKEND)          +20 PROC**                  03733001
002350 00000F4A                    3781          DC    A(FOREND)            +24 FOR                     03734001
                                   3782 *                                                               03735001
002354 45C0 598C            0098C  3783 TERMBGN  BAL   R12,COB                                          03736001
002358 922C 3000      00000        3784          MVI   0(R3),XFEND          MOVE OUT END TO O/P         03737001
00235C 4130 3001            00001  3785          LA    R3,1(,R3)                                        03738001
002360 58F0 DCD8            00CD8  3786          L     R15,SP                                           03739001
002364 06F0                        3787          BCTR  R15,0                RELEASE BEGIN IN STACK      03740001
002366 50F0 DCD8            00CD8  3788          ST    R15,SP                                           03741001
00236A 47F0 B300            02300  3789          B     TERMSEAC                                         03742001
                                   3790 *                                                               03743001
                                   3791 *        SLUT2                                                  03744001
                                   3792 *                                                               03745001
                                   3793 *        ENTERED FROM IEX00 IF INTERUPT OCCURS BEFORE GETMAIN   03746001
                                   3794 *                                                               03747001
00236E 9620 DD90      00D90        3795 SLUT2    OI    BITS3,NOFREE          INTERUPT OCCURED PRIOR     03748001
002372 47F0 B464            02464  3796          B     SCANEND               GOTO PROCESS TERMINATING PART 03749001
                                   3797 *                                                               03750001
                                   3798 *        READROUT                                               03751001
                                   3799 *                                                               03752001
                                   3800 *        ENTERED AFTER FINAL END COMMENT HAS BEEN CHECKED SHOULD 03753001
                                   3801 *        EXIT TO EODADIN VIA OS EOD ROUTINE                     03754001
                                   3802 *                                                               03755001
002376 4110 1001            00001  3803 READROUT LA    R1,1(,R1)                                        03756001
00237A 4190 B37E            0237E  3804          LA    R9,*+4                                           03757001
00237E DD48 1000 B814 00000 02814  3805          TRT   0(73,R1),BTABLE      ONLY VALID CHARACTER AFTER  03758001
002384 952F 1000      00000        3806          CLI   0(R1),XFZETA         FINAL END COMMENT IS ZETA ? 03759001
002388 4780 5A28            00A28  3807          BE    CIB                                              03760001
00238C 47F0 57C4            007C4  3808          B     ERR9                 ANYTHING ELSE FOUND         03761001
                                   3809 *                                                               03762001
002390 0727                        3810 E39PAR   DC    X'0727'              E39                         03763001
                                   3811 *                                                               03764001
002392 4160 B390            02390  3812 ERROR39  LA    R6,E39PAR                                        03765001
002396 45C0 584A            0084A  3813          BAL   R12,ERROR1           CREATE E39 PATTERN          03766001
00239A 4860 BD72            02D72  3814          LH    R6,ENDCOUNT                                      03767001
00239E 4E60 BD60            02D60  3815          CVD   R6,DOUBLE                                        03768001
0023A2 F332 BDC8 BD65 02DC8 02D65  3816          UNPK  SAVE1(4),DOUBLE+5(3)                             03769001
0023A8 96F0 BDCB      02DCB        3817          OI    SAVE1+3,X'F0'        INSERT NUMBER OF ENDS MISSING 03770001
0023AC D202 F004 BDC9 00004 02DC9  3818          MVC   4(3,R15),SAVE1+1     IN ERROR PATTERN            03771001
                                   3819 *                                                               03772001
                                   3820 *        EODADIN                                                03773001
                                   3821 *                                                               03774001
                                   3822 *        FALL THROUGH TO TERMINATION SECTION                    03775001
                                   3823 *                                                               03776001
                                   3824 *        TERMINATION                                            03777001
                                   3825 *                                                               03778001
                                   3826 *        WRITES PB0 ITAB BLOCK FOR A PRECOMPILED PROCEDURE      03779001
                                   3827 *        WRITES LAST O/P REC IF MORE THAN ONE O/P RECORD        03780001
                                   3828 *        CORRECTS PRPT AND MOVES THE CONSTANTS 0 TROUGH 15 TO   03781001
                                   3829 *        THE CONSTANT POOL                                      03782001
                                   3830 *        IF NO TERMINATION ERROR AND EITHER DECK OR LOAD IS     03783001
                                   3831 *        SPECIFIED ESD CARD AND TXT CARDS ARE GENERATED WITH    03784001
                                   3832 *        GENERATE                                               03785001
                                   3833 *        CHECKS LAST ITAB RECORD WRITTEN, IF ANY                03786001
                                   3834 *        CLOSES SYSIN, SYSUT1, SYSUT3                           03787001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.12

                                   3835 *       MAKES A FREEMAIN                                                03788001
                                   3836 *       EXITS -                                                         03789001
                                   3837 *       IEX20 IF NO TERMINATING ERROR                                   03790001
                                   3838 *       IEX21 IF TERMINATING ERROR                                      03791001
                                   3839 *                                                                       03792001
0023B2 9108 D080      00080        3840 EODADIN  TM    COMPFLGS,TERR          TERMINATING ERROR ?              03793001
0023B6 4710 B3F6            023F6  3841          BO    KOPOOLRL               YES, DO NOT WRITE OUT ANYTHING   03794001
0023BA 5810 DD64            00D64  3842          L     R1,AITAB               CHECK IF PB0                     03795001
0023BE 4110 100B            0000B  3843          LA    R1,11(,R1)             CONTAINS ANYTHING                03796001
0023C2 5910 DD68            00D68  3844          C     R1,AITL                                                 03797001
0023C6 4780 B3D6            023D6  3845          BE    NOPBN0                 NO PB0                           03798001
0023CA 58F0 DD68            00D68  3846          L     R15,AITL                                                03799001
0023CE 9608 DD8F      00D8F        3847          OI    BITS2,X'08'            SET SWITCH                       03800001
0023D2 4540 5FCC            00FCC  3848          BAL   R4,WRTITAB             WRITE OUT PB0                    03801001
0023D6 45C0 598C            0098C  3849 NOPBN0   BAL   R12,COB                                                 03802001
0023DA 922D 3000      00000        3850          MVI   0(R3),X'2D'            MOVE OMEGA TO O/P                03803001
0023DE 4130 3001            00001  3851          LA    R3,1(,R3)                                               03804001
0023E2 9500 DD85      00D85        3852          CLI   ONC,0                  ONLY ONE O/P RECORD ?            03805001
0023E6 4780 B3F2            023F2  3853          BE    NOPBN0A                YES, BRANCH                      03806001
0023EA 45C0 5992            00992  3854          BAL   R12,COBSPEB            NO, WRITE LAST O/P BUFFER        03807001
0023EE 47F0 B3F6            023F6  3855          B     KOPOOLRL                                                03808001
                                   3856 *                                 SOURCE PROGRAM IN STORAGE        03809001
0023F2 9640 D082      00082        3857 NOPBN0A  OI    COMPFLGS+2,SPIC        LEAVE THE SINGLE BUFFER IN CORE  03810001
0023F6 5870 DCC0            00CC0  3858 KOPOOLRL L     R7,POOLLOC                                              03811001
0023FA D23F 7000 BD0C 00000 02D0C  3859          MVC   0(64,R7),KFCONST       MOVE THE CONSTANTS 0 TO 15       03812001
002400 5860 D0A4            000A4  3860          L     R6,PRPT                                                 03813001
002404 5A60 BD28            02D28  3861          A     R6,KF7                 MAKE PRPT POINT                  03814001
002408 5060 D0A4            000A4  3862          ST    R6,PRPT                TO THE NEAREST                   03815001
00240C 94F8 D0A7      000A7        3863          NI    PRPT+3,X'F8'           DOUBLE WORD BOUNDARY             03816001
002410 D200 D09F DD84 0009F 00D84  3864          MVC   PBN+1(1),PBC           SAVE NUMBER OF BLOCKS            03817001
002416 4310 DD82            00D82  3865          IC    R1,FSN                                                  03818001
00241A 0610                        3866          BCTR  R1,0                   CORRECT FSN                      03819001
00241C 4210 DD83            00D83  3867          STC   R1,ZFSNMAX             SET FOR SCAN 3                   03820001
002420 D503 DD7C BD4C 00D7C 02D4C  3868          CLC   MGESITL,KF25000        WILL ITAB OVER FLOW ?            03821001
002426 4740 B430            02430  3869          BL    KOPOOLAA                                                03822001
00242A 4560 578A            0078A  3870          BAL   R6,ERR7                                                 03823001
                                   3871 *                                                                       03824001
00242E 0413                        3872          DC    X'0413'                E 19                             03825001
                                   3873 *                                                                       03826001
002430 9160 D081      00081        3874 KOPOOLAA TM    COMPFLGS+1,NDECK+NLOAD DECK AND OR LOAD SPECIFIED       03827001
002434 4710 B464            02464  3875          BO    SCANEND                NO, SKIP ESD CARD GENERATION     03828001
002438 1B66                        3876          SR    R6,R6                                                   03829001
00243A D207 B444 BD84 02444 02D84  3877          MVC   ESDPARM,ESDNAME        SET NAME OF PROCEDURE/BEGIN      03830001
002440 4520 B56E            0256E  3878 KOPOOLBB BAL   R2,GENESD              GENERATE ESD RECORD              03831001
                                   3879 *                                                                       03832001
002444 4040404040404040            3880 ESDPARM  DC    CL8' '                 ESD NAME                         03833001
00244C 0000                        3881          DC    X'0000'                ESD TYPE SD                      03834001
                                   3882 *                                                                       03835001
00244E D202 101D BD0C 0001D 02D0C  3883          MVC   29(3,R1),KF0           CORRECT FIRST ESD CARD           03836001
002454 5820 DD54            00D54  3884          L     R2,AKOPOOL                                              03837001
002458 D201 B462 D0A6 02462 000A6  3885          MVC   GENTLEN,PRPT+2         GET LENGTH OF KOPOOL FOR TXT     03838001
00245E 45E0 B580            02580  3886          BAL   R14,GENTXTS            GENERATE TXT CARD                03839001
                                   3887 *                                                                       03840001
002462 0000                        3888 GENTLEN  DC    H'0'                   UPDATED PRIOR TO GENTXTS CALL    03841001
                                   3889 *                                                                       03842001
002464 9110 DD90      00D90        3890 SCANEND  TM    BITS3,FRSITB                                            03843001
002468 4780 B47A            0247A  3891          BZ    CLSYSUT3                                                03844001
                                   3892 *                                                                       03845001
                                   3893          CHECK ITABC                                                   03846001
00246C 4110 8084            01084  3894+         LA    1,ITABC                          LOAD PARAMETER REG 1   02-IHBIN
002470 58E0 1008            00008  3895+         L     14,8(0,1)               PICK UP DCB ADDR                01-CHECK
002474 58F0 E034            00034  3896+         L     15,52(0,14)             LOAD CHECK ROUTINE ADDR         01-CHECK
002478 05EF                        3897+         BALR  14,15                   LINK TO CHECK ROUTINE           01-CHECK
                                   3898 *                                                                       03847001
00247A 5860 D06C            0006C  3899 CLSYSUT3 L     R6,AUT3DCB                                              03848001
                                   3900 *                                                                       03849001
                                   3901          CLOSE ((R6),REREAD),TYPE=T   RESET SYSUT3                     03850001
00247E 0700                        3902+         CNOP  0,4                              ALIGN LIST TO FULLWORD 01-CLOSE
002480 4510 B488            02488  3903+         BAL   1,*+8                            LOAD REG1 W/LIST ADDR  01-CLOSE
002484 00000000                    3904+         DC    A(0)                             OPTION AND DCB ADDRESS 01-CLOSE
002488 5061 0000            00000  3905+         ST    R6,0(1,0)                        STORE DCB ADDRESS      01-CLOSE
00248C 9290 1000      00000        3906+         MVI   0(1),144                         MOVE IN OPTION BYTE    01-CLOSE
002490 0A17                        3907+         SVC   23                               ISSUE TCLOSE SVC       01-CLOSE
                                   3908 *                                                                       03851001
002492 5860 D058            00058  3909          L     R6,ASYSDCB             CLOSE SYSIN                      03852001
                                   3910 *                                                                       03853001
                                   3911          CLOSE ((R6))                                                  03854001
002496 0700                        3912+         CNOP  0,4                              ALIGN LIST TO FULLWORD 01-CLOSE
002498 4510 B4A0            024A0  3913+         BAL   1,*+8                            LOAD REG1 W/LIST ADDR  01-CLOSE
00249C 00000000                    3914+         DC    A(0)                             OPTION AND DCB ADDRESS 01-CLOSE
0024A0 5061 0000            00000  3915+         ST    R6,0(1,0)                        STORE DCB ADDRESS      01-CLOSE
0024A4 9280 1000      00000        3916+         MVI   0(1),128                         MOVE IN OPTION BYTE    01-CLOSE
0024A8 0A14                        3917+         SVC   20                               ISSUE CLOSE SVC        01-CLOSE
                                   3918 *                                                                       03855001
                                   3919          FREEPOOL (R6)                                                 03856001
0024AA 1816                        3920+         LR    1,R6                             LOAD PARAMETER REG 1   02-IHBIN
0024AC 58F0 1014            00014  3921+         L     15,20(0,1)             LOAD BUFCB ADDRESS               01-FREEP
0024B0 9601 1017      00017        3922+         OI    23(1),1                INDICATE NO BUFCB ADDR           01-FREEP
0024B4 1BEE                        3923+         SR    14,14                  CLEAR REGISTER                   01-FREEP
0024B6 1B11                        3924+         SR    1,1                    CLEAR REGISTER           @ZA79785 01-FREEP
0024B8 BF13 F006            00006  3925+         ICM   1,3,6(15)              LOAD LENGTH OF BUFFERS   @ZA86199 01-FREEP
0024BC 43E0 F005            00005  3926+         IC    14,5(0,15)             NUMBER OF BUFFERS        @ZA79785 01-FREEP
0024C0 1C0E                        3927+         MR    0,14                   AREA TO BE FREED         @ZA79785 01-FREEP
0024C2 4110 1008            00008  3928+         LA    1,8(0,1)               ACCOUNT FOR BCB          @ZA86199 01-FREEP
0024C6 9140 F004      00004        3929+         TM    4(15),X'40'            IS BUFCB 16 BYTES         @ZA19719 01-FREEP
0024CA 47E0 B4D2            024D2  3930+         BNO   *+8                    BRANCH IF BUFCB = 8 BYTES        01-FREEP
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

0024CE 4110 1008            00008  3931+         LA    1,8(0,1)                ADJUST SIZE PLUS 8      @ZA87508 01-FREEP
0024D2 1801                        3932+         LR    0,1                     LOAD LENGTH TO BE FREED @ZA86199 01-FREEP
0024D4 4110 F000            00000  3933+         LA    1,0(0,15)               LOAD AREA ADDRESS                01-FREEP
0024D8 0A0A                        3934+         SVC   10                      ISSUE FREEMAIN SVC               01-FREEP
                                   3935 *                                                                       03857001
0024DA 5860 D064            00064  3936          L     R6,AUT1DCB                                               03858001
0024DE 9108 D080      00080        3937          TM    COMPFLGS,TERR           TERMINATING ERROR ?              03859001
0024E2 4710 B500            02500  3938          BO    CLSPERM                 YES, CLOSE SYSUT1 FOR GOOD       03860001
                                   3939 *                                                                       03861001
                                   3940          CLOSE ((R6),REREAD),TYPE=T    RESET SYSUT1                     03862001
0024E6 0700                        3941+         CNOP  0,4                               ALIGN LIST TO FULLWORD 01-CLOSE
0024E8 4510 B4F0            024F0  3942+         BAL   1,*+8                             LOAD REG1 W/LIST ADDR  01-CLOSE
0024EC 00000000                    3943+         DC    A(0)                              OPTION AND DCB ADDRESS 01-CLOSE
0024F0 5061 0000            00000  3944+         ST    R6,0(1,0)                         STORE DCB ADDRESS      01-CLOSE
0024F4 9290 1000      00000        3945+         MVI   0(1),144                          MOVE IN OPTION BYTE    01-CLOSE
0024F8 0A17                        3946+         SVC   23                                ISSUE TCLOSE SVC       01-CLOSE
                                   3947 *                                                                       03863001
0024FA 47F0 B512            02512  3948          B     FREE                                                     03864001
                                   3949 *                                                                       03865001
                                   3950 CLSPERM  CLOSE ((R6),REREAD)           CLOSE SYSUT1                     03866001
0024FE 0700                        3951+         CNOP  0,4                               ALIGN LIST TO FULLWORD 01-CLOSE
002500 4510 B508            02508  3952+CLSPERM  BAL   1,*+8                             LOAD REG1 W/LIST ADDR  01-CLOSE
002504 00000000                    3953+         DC    A(0)                              OPTION AND DCB ADDRESS 01-CLOSE
002508 5061 0000            00000  3954+         ST    R6,0(1,0)                         STORE DCB ADDRESS      01-CLOSE
00250C 9290 1000      00000        3955+         MVI   0(1),144                          MOVE IN OPTION BYTE    01-CLOSE
002510 0A14                        3956+         SVC   20                                ISSUE CLOSE SVC        01-CLOSE
                                   3957 *                                                                       03867001
002512 9120 DD90      00D90        3958 FREE     TM    BITS3,NOFREE            INTERUPT BEFORE GETMAIN ?        03868001
002516 4710 B556            02556  3959          BO    GETERRPH                YES, DO NOT MAKE FREEMAIN        03869001
00251A 5800 DCBC            00CBC  3960          L     R0,POOLLEN                                               03870001
00251E 5810 DCC0            00CC0  3961          L     R1,POOLLOC                                               03871001
                                   3962 *                                                                       03872001
                                   3963          FREEMAIN R,LV=(0),A=(1)                                        03873001
                                   3964+*        OS/VS2 RELEASE 3 VERSION  -- 10/25/74                          01-FREEM
002522 4110 1000            00000  3965+         LA    1,0(0,1)                          CLEAR HI ORDER BYTE    01-FREEM
002526 0A0A                        3966+         SVC   10                                ISSUE FREEMAIN SVC     01-FREEM
                                   3967 *                                                                       03874001
002528 9608 D082      00082        3968          OI    COMPFLGS+2,NOSC         SET SWITCH FOR ERROR MESSAGES    03875001
00252C 9108 D080      00080        3969          TM    COMPFLGS,TERR           TERMINATING ERROR ?              03876001
002530 4710 B556            02556  3970          BO    GETERRPH                YES, CALL IEX21                  03877001
002534 BF6F BDB4            02DB4  3971          ICM   R6,B'1111',BRACKET      BRACKET COUNTER ZERO ?           03878001
002538 4780 B540            02540  3972          BZ    NEXTMOD                 YES, BRANCH                      03879001
00253C 9690 D080      00080        3973          OI    COMPFLGS,COMPMODE+SERR  NO, SET SYNTAX MODE              03880001
                                   3974 *                                                                       03881001
                                   3975 NEXTMOD  XCTL  EP=IEX20000             GOTO ITAB MANIPULATION           03882001
002540                             3976+NEXTMOD  DS    0H                                                       01-XCTL
002540                             3977+         CNOP  0,4                                                      02-IHBIN
002540 45F0 B554            02554  3978+         BAL   15,*+20              BRANCH AROUND CONSTANTS             02-IHBIN
002544 0000254C                    3979+         DC    A(*+8)               ADDR. OF PARM. LIST                 02-IHBIN
002548 00000000                    3980+         DC    A(0)                  DCB ADDRESS PARAMETER              02-IHBIN
00254C C9C5E7F2F0F0F0F0            3981+         DC    CL8'IEX20000'         EP PARAMETER                       02-IHBIN
002554 0A07                        3982+         SVC   7                                 ISSUE XCTL SVC         01-XCTL
                                   3983 *                                                                       03883001
                                   3984 GETERRPH XCTL  EP=IEX21000             GOTO ERROR MESSAGE HANDLING      03884001
002556                             3985+GETERRPH DS    0H                                                       01-XCTL
002556 0700                        3986+         CNOP  0,4                                                      02-IHBIN
002558 45F0 B56C            0256C  3987+         BAL   15,*+20              BRANCH AROUND CONSTANTS             02-IHBIN
00255C 00002564                    3988+         DC    A(*+8)               ADDR. OF PARM. LIST                 02-IHBIN
002560 00000000                    3989+         DC    A(0)                  DCB ADDRESS PARAMETER              02-IHBIN
002564 C9C5E7F2F1F0F0F0            3990+         DC    CL8'IEX21000'         EP PARAMETER                       02-IHBIN
00256C 0A07                        3991+         SVC   7                                 ISSUE XCTL SVC         01-XCTL
                                   3992 *                                                                       03885001
                                   3993 *        GENERATE                                                       03886001
                                   3994 *                                                                       03887001
                                   3995 *        REGISTER DEFINITIONS                                           03888001
                                   3996 *                                                                       03889001
                                   3997 *        R1                            OUTPUT RECORD POINTER            03890001
                                   3998 *        R2                            ADDR OF INFORMATION              03891001
                                   3999 *        R3                            TYPE OF RECORD TO BE GENERATED   03892001
                                   4000 *        R4                            RETURN REG                       03893001
                                   4001 *        R14                           L'INFORMATION FROM CALL          03894001
                                   4002 *        R15                           L'WITHIN RECORD                  03895001
                                   4003 *                                                                       03896001
                                   4004 *        BIT PATTERNS                                                   03897001
                                   4005 *                                                                       03898001
                      00000        4006 SDENTRY  EQU   X'00'                   SD ENTRY IDENTIFICATION          03899001
                      00001        4007 LDENTRY  EQU   X'01'                   LD ENTRY IDENTIFICATION          03900001
                      0000D        4008 RLDFLAG  EQU   B'00001101'             FLAG USED IN RLD ENTRY           03901001
                                   4009 *                                                                       03902001
                                   4010 *        ADDR DISPLACEMENTS                                             03903001
                                   4011 *                                                                       03904001
00256E 41E0 0010            00010  4012 GENESD   LA    R14,16                  R14 ALWAYS 16                    03905001
002572 4130 B678            02678  4013          LA    R3,ESDT                 INDICATE ESD CALL                03906001
002576 D203 D0B0 2000 000B0 00000  4014          MVC   PIDENT,0(R2)            NAME TO IDENT PART               03907001
00257C 47F0 B5CE            025CE  4015          B     GEN3                    CALL FOR FIRST OUT REC           03908001
                                   4016 *                                                                       03909001
002580 4140 E002            00002  4017 GENTXTS  LA    R4,2(,R14)              COMPUTE RETURN ADDR              03910001
002584 48E0 E000            00000  4018          LH    R14,0(,R14)             LOAD R14 GIVEN IN CALL           03911001
002588 4130 B69E            0269E  4019 GEN2     LA    R3,TXTT                 INDICATE TXT CALL                03912001
                                   4020 *                                                                       03913001
00258C 5810 D0A8            000A8  4021 GEN1     L     R1,SAVOUTA              LOAD ADDR OF OUT RECORD          03914001
002590 D502 1001 3001 00001 00001  4022          CLC   1(3,R1),1(R3)           RECORD RIGHT TYPE ?              03915001
002596 4770 B5CE            025CE  4023          BNE   GEN3                    NO, CALL IOR NEW                 03916001
00259A D501 100A 300C 0000A 0000C  4024          CLC   10(2,R1),12(R3)         RECORD FILLED ?                  03917001
0025A0 47B0 B5CE            025CE  4025          BNL   GEN3                    YES, CALL FOR NEW                03918001
0025A4 41F0 0038            00038  4026 GEN6     LA    R15,56                                                   03919001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                           X390 3.1.04  2012/08/17 13.12

0025A8 4800 100A              0000A  4027          LH    R0,10(,R1)           R0 = L'INFORMATION IN REC         03920001
0025AC 1BF0                          4028          SR    R15,R0               R15 = EMPTY POS LEFT IN RECORD    03921001
0025AE 19FE                          4029          CR    R15,R14              ENOUTH SPACE LEFT ?               03922001
0025B0 4740 B5B6              025B6  4030          BL    GEN6A                NO                                03923001
0025B4 18FE                          4031          LR    R15,R14              YES R15=R14 FROM CALL             03924001
0025B6 1AF0                          4032 GEN6A    AR    R15,R0                                                 03925001
0025B8 40F0 100A              0000A  4033          STH   R15,10(,R1)          INSERT NEW LENGTH INTO RECORD     03926001
                                     4034 *                                                                     03927001
0025BC 1BF0                          4035          SR    R15,R0                                                 03928001
0025BE 1A10                          4036          AR    R1,R0                START ADDR WITHIN RECORD          03929001
0025C0 1BEF                          4037          SR    R14,R15              REMAINING LENGTH                  03930001
0025C2 47F0 300E              0000E  4038          B     14(,R3)              TO DIFFERENT MOVE ROUTINES        03931001
                                     4039 *                                                                     03932001
0025C6 12EE                          4040 GEN4     LTR   R14,R14              MORE INFORMATION MUST BE MOVED ?  03933001
0025C8 4720 B5CE              025CE  4041          BH    GEN3                 YES                               03934001
0025CC 07F4                          4042          BR    R4                                                     03935001
                                     4043 *                                                                     03936001
                        025CE        4044 GEN3     EQU   *                    CALL FOR NEW OUTPUT RECORD        03937001
0025CE 50E0 BD74              02D74  4045 PUNCH    ST    14,ERRSAVE                                             03938001
0025D2 9160 D081        00081        4046          TM    COMPFLGS+1,NLOAD+NDECK BOTH DECK AND LOAD SPECIFIED ?  03939001
0025D6 4780 B5FE              025FE  4047          BZ    BOTH                 YES                               03940001
0025DA 5810 D060              00060  4048          L     R1,APCHDCB           R1- > SYSPUNCH DCB                03941001
0025DE 9120 D081        00081        4049          TM    COMPFLGS+1,NDECK     DECK ?                            03942001
0025E2 4780 B5EA              025EA  4050          BZ    PUT1                 YES                               03943001
0025E6 5810 D048              00048  4051 PUT1A    L     R1,ALINDCB           R1 -> SYSLIN DCB                  03944001
                                     4052 *                                                                     03945001
                                     4053 PUT1     PUT   (R1)                 PUT FOR SYSLIN AND SYSPUNCH IF    03946001
0025EA 1811                          4054+PUT1     LR    1,R1                           LOAD PARAMETER REG 1    02-IHBIN
0025EC 58F0 1030              00030  4055+         L     15,48(0,1)            LOAD PUT ROUTINE ADDR            01-PUT
0025F0 05EF                          4056+         BALR  14,15                 LINK TO PUT ROUTINE              01-PUT
                                     4057 *                                                                     03947001
0025F2 5010 D0A8              000A8  4058          ST    R1,SAVOUTA           ONLY SYSPUNCH SPECIFIED           03948001
0025F6 58E0 BD74              02D74  4059          L     14,ERRSAVE                                             03949001
0025FA 47F0 B630              02630  4060          B     PUNCHOUT                                               03950001
                                     4061 *                                                                     03951001
0025FE 9102 DD8F        00D8F        4062 BOTH     TM    BITS2,X'02'          FIRST PUT ?                       03952001
002602 4780 B628              02628  4063          BZ    FIRSTPUT             YES                               03953001
002606 58E0 D0AC              000AC  4064          L     R14,OUTAREA2         COPY SYSLIN BUFFER TO SYSPUNCH    03954001
00260A 5810 D0A8              000A8  4065          L     R1,SAVOUTA                                             03955001
00260E D24F E000 1000 00000 00000    4066          MVC   0(80,R14),0(R1)      BUFFER                            03956001
002614 5810 D060              00060  4067 PUT2     L     R1,APCHDCB           R1- > SYSPUNCH DCB                03957001
                                     4068 *                                                                     03958001
                                     4069          PUT   (R1)                 PUT FOR SYSPUNCH WHEN BOTH HAS    03959001
002618 1811                          4070+         LR    1,R1                           LOAD PARAMETER REG 1    02-IHBIN
00261A 58F0 1030              00030  4071+         L     15,48(0,1)            LOAD PUT ROUTINE ADDR            01-PUT
00261E 05EF                          4072+         BALR  14,15                 LINK TO PUT ROUTINE              01-PUT
                                     4073 *                                                                     03960001
002620 5010 D0AC              000AC  4074          ST    R1,OUTAREA2          BEEN SPECIFIED                    03961001
002624 47F0 B5E6              025E6  4075          B     PUT1A                GOTO PUT SYSLIN                   03962001
                                     4076 *                                                                     03963001
002628 9602 DD8F        00D8F        4077 FIRSTPUT OI    BITS2,X'02'                                            03964001
00262C 47F0 B614              02614  4078          B     PUT2                                                   03965001
                                     4079 *                                                                     03966001
002630 D203 1000 3000 00000 00000    4080 PUNCHOUT MVC   0(4,R1),0(R3)        INSERT FIRST 4 BYTES              03967001
002636 9240 1004        00004        4081          MVI   4(R1),C' '           INSERT ONE BLANK                  03968001
00263A D242 1005 1004 00005 00004    4082          MVC   5(67,R1),4(R1)       BLANK OUTPUT RECORD               03969001
002640 D203 1048 D0B0 00048 000B0    4083          MVC   72(4,R1),PIDENT      INSERT PROGRAM IDENT              03970001
002646 FA30 D0B4 BD8C 000B4 02D8C    4084          AP    CARDCNT,KP1          INCR CARD COUNT                   03971001
00264C F333 104C D0B4 0004C 000B4    4085          UNPK  76(4,R1),CARDCNT     UNPACK INTO RECORD                03972001
002652 96F0 104F        0004F        4086          OI    79(R1),X'F0'         MAKE PRINTABLE                    03973001
002656 D201 100A 3004 0000A 00004    4087          MVC   10(2,R1),4(R3)       INSERT INITIAL LENGTH             03974001
00265C D205 100E 3006 0000E 00006    4088          MVC   14(6,R1),6(R3)       INSERT ESID+R AND P               03975001
002662 D502 B69F 3001 0269F 00001    4089          CLC   TXTT+1(3),1(R3)      TXT RECORD PROCESSED ?            03976001
002668 4770 B5A4              025A4  4090          BNE   GEN6                 NO                                03977001
00266C 5061 0004              00004  4091          ST    R6,4(R1)             YES, INSERT R6                    03978001
002670 9240 1004        00004        4092          MVI   4(R1),C' '                                             03979001
002674 47F0 B5A4              025A4  4093          B     GEN6                                                   03980001
                                     4094 *                                                                     03981001
                                     4095 *        TABLES AND MOVE ROUTINES                                     03982001
                                     4096 *                                                                     03983001
                                     4097 *        ESD RECORD                                                   03984001
                                     4098 *                                                                     03985001
002678 02                            4099 ESDT     DC    X'02'                RECORD CODE                       03986001
002679 C5E2C4                        4100          DC    C'ESD'               IDENTIFICATION                    03987001
00267C 0000                          4101          DC    H'0'                 INITIAL LENGTH 0                  03988001
00267E 404040404040                  4102          DC    C'      '                                              03989001
002684 0030                          4103          DC    H'48'                MAXIMUM LENTH IN RECORD           03990001
                                     4104 *                                                                     03991001
                                     4105 *        MOVE ESD INFORMATION TO OUTPUT                               03992001
                                     4106 *                                                                     03993001
002686 D208 1010 2000 00010 00000    4107 GEN7     MVC   16(9,R1),0(R2)       MOVE ESD NAME AND ESD TYPE SD TO  03994001
                                     4108 *                               ESD OUTPUT RECORD                 03995001
00268C D206 1019 BDB8 00019 02DB8    4109          MVC   25(L'ESDCON,R1),ESDCON CHANGE LAST PART OF ENTRY       03996001
002692 4130 0001              00001  4110          LA    R3,1                 SET ESID NUMBER TO 1              03997001
002696 4031 000E              0000E  4111          STH   R3,14(R1)            INSERT ESID NUMBER                03998001
00269A 47F0 200A              0000A  4112          B     10(,R2)              RETURN TO CALLING ROUTINE         03999001
                                     4113 *                                                                     04000001
                                     4114 *        TXT RECORD                                                   04001001
                                     4115 *                                                                     04002001
00269E 02                            4116 TXTT     DC    X'02'                RECORD CODE                       04003001
00269F E3E7E3                        4117          DC    C'TXT'               IDENTIFICATION                    04004001
0026A2 0000                          4118          DC    H'0'                 INITIAL LENGTH 0                  04005001
0026A4 0001                          4119          DC    H'1'                 ESID                              04006001
0026A6 40404040                      4120          DC    C'    '                                                04007001
0026AA 0038                          4121          DC    H'56'                MAXIMUM LENGTH                    04008001
                                     4122 *                                                                     04009001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                                   4123 *             MOVE TXT INFORMATION TO OUTPUT                            04010001
                                   4124 *                                                                       04011001
0026AC 06F0                        4125 GEN8     BCTR  R15,0                  DECR R15                          04012001
0026AE 42F0 B6B3            026B3  4126          STC   R15,*+5                INSERT LENGTH TO MOVE IN MVC      04013001
0026B2 D200 1010 2000 00010 00000  4127          MVC   16(0,R1),0(R2)         MOVE INFORMATION TO OUTAREA       04014001
0026B8 416F 6001            00001  4128          LA    R6,1(R15,R6)           INCREASE PROGRAM POINTER          04015001
0026BC 412F 2001            00001  4129          LA    R2,1(R15,R2)           MODIFY DATA ADDR                  04016001
0026C0 47F0 B5C6            025C6  4130          B     GEN4                   EXIT MOVE TXT ROUTINE             04017001
                                   4131 *                                                                       04018001
                                   4132 *             BPRTAB                                                    04019001
                                   4133 *                                                                       04020001
                                   4134 *             CONTAINS ADDR CONSTANTS OF PROGRAMS UTILIZED BY -         04021001
                                   4135 *             TEST                                                      04022001
                                   4136 *             LIST                                                      04023001
                                   4137 *             POINT                                                     04024001
                                   4138 *             APOSTROF                                                  04025001
                                   4139 *             POINTLST                                                  04026001
                                   4140 *                                                                       04027001
                                   4141 *             THE ADDRESSES ARE PICKED UP WITH DISPLACEMENTS FROM -     04028001
                                   4142 *             TESTTABL                                                  04029001
                                   4143 *             ARTABLE                                                   04030001
                                   4144 *             PTTABLE                                                   04031001
                                   4145 *             ATABLE                                                    04032001
                                   4146 *             PTTABLE FOR POINTLST 56 IS ADDED TO DISP GIVEN            04033001
                                   4147 *                                                                       04034001
0026C4 00000000                    4148 BPRTAB   DC    A(0)             + 00                                    04035001
0026C8 00000210                    4149          DC    A(TRANSOP)       + 04                                    04036001
0026CC 00000210                    4150          DC    A(TRANSOP)       + 08                                    04037001
0026D0 00000210                    4151          DC    A(TRANSOP)       + 12                                    04038001
0026D4 00000210                    4152          DC    A(TRANSOP)       + 16                                    04039001
0026D8 00000210                    4153          DC    A(TRANSOP)       + 20                                    04040001
0026DC 00000210                    4154          DC    A(TRANSOP)       + 24                                    04041001
0026E0 000003D2                    4155          DC    A(COLON)         + 28  COLON                             04042001
0026E4 000005D4                    4156          DC    A(SEMCO)         + 32  SEMICOLON                         04043001
0026E8 00000280                    4157          DC    A(RIGHTPAR)      + 36                                    04044001
0026EC 000001F8                    4158          DC    A(BLANK)         + 40                                    04045001
0026F0 000006C0                    4159          DC    A(ERR1)          + 44                                    04046001
0026F4 000002A6                    4160          DC    A(POINT)         + 48                                    04047001
0026F8 00000300                    4161          DC    A(APOSTROF)      + 52                                    04048001
0026FC 00000A28                    4162          DC    A(CIB)           + 56                                    04049001
002700 000002CA                    4163          DC    A(ASSIGN)        + 60                                    04050001
002704 000002BC                    4164          DC    A(DECPOINT)      + 64                                    04051001
002708 00000738                    4165          DC    A(ERR5)          + 68  ERROR AFTER POINT                 04052001
00270C 00000348                    4166          DC    A(BLKAPOS)       + 72  BLANK AFTER APOSTROPHE            04053001
002710 000003AE                    4167          DC    A(NPAFTAPO)      + 76  NOT PERMITTED AFTER APOSTR        04054001
002714 0000031A                    4168          DC    A(SCALE)         + 80  DIGIT OR SIGN AFTER APOSTROPHE    04055001
002718 00001AA4                    4169          DC    A(COLONLST)      + 84  COLON IN LIST                     04056001
00271C 00001ABE                    4170          DC    A(SEMCLST)       + 88  SEMICOLON IN LIST                 04057001
002720 00000B0C                    4171          DC    A(DELIMIT)       + 92  DELIMITER PROGRAM                 04058001
002724 0000038A                    4172          DC    A(ZETAAPO)       + 96  ZETA AFTER APOSTROPHE             04059001
002728 00000B7C                    4173          DC    A(EROUT)         +100  ERROR (FROM W1,W2OR W3 TAB)       04060001
00272C 00001A10                    4174          DC    A(LEFTPARL)      +104  LEFT PARENTHESIS IN LIST          04061001
002730 000019F4                    4175          DC    A(RIGTPARL)      +108  RIGHT PARENTHESIS IN LIST         04062001
002734 000019EC                    4176          DC    A(PZETA)         +112  ZETA AFTER POINT IN LIST          04063001
002738 000002CA                    4177          DC    A(ASSIGN)        +116  ASSIGNMENT POINT IN LIST          04064001
00273C 000002BC                    4178          DC    A(DECPOINT)      +120  DECPOINT IN LIST                  04065001
002740 00000730                    4179          DC    A(ERR5A)         +124  POINT ERROR IN LIST               04066001
002744 00001A66                    4180          DC    A(COMMALST)      +128  COMMA IN LIST                     04067001
002748 000019D6                    4181          DC    A(PONTLST)       +132  POINT IN LIST                     04068001
00274C 00001B0E                    4182          DC    A(SLASHLST)      +136  SLASH IN LIST                     04069001
002750 00001DF4                    4183          DC    A(QUOTE)         +140  QUOTE                             04070001
002754 000005D0                    4184          DC    A(SEMC60)        +144                                    04071001
                                   4185 *                                                                       04072001
                                   4186 *             PTTABLE                                                   04073001
                                   4187 *                                                                       04074001
                                   4188 *             USED BY -                                                 04075001
                                   4189 *             POINT                                                     04076001
                                   4190 *             PONTLST                                                   04077001
                                   4191 *             GIVES DISPLACEMENTS TO BPRTAB                             04078001
                                   4192 *             WHEN USED BY PONTLST 56 IS ADDED TO ORIGINAL DISP         04079001
                                   4193 *                                                                       04080001
002758 44                          4194 PTTABLE  DC    AL1(68)               +00    XFPLUS                      04081001
002759 44                          4195          DC    AL1(68)               +01    XFMINUS                     04082001
00275A 44                          4196          DC    AL1(68)               +02    XFASTER                     04083001
00275B 44                          4197          DC    AL1(68)               +03    XFSLASH                     04084001
00275C 00                          4198          DC    AL1(0)                +04                                04085001
00275D 00                          4199          DC    AL1(0)                +05                                04086001
00275E 44                          4200          DC    AL1(68)               +06    XFLBRAC                     04087001
00275F 44                          4201          DC    AL1(68)               +07    XFCOLON                     04088001
002760 00                          4202          DC    AL1(0)                +08    XFLSQBR                     04089001
002761 00                          4203          DC    AL1(0)                +09                                04090001
002762 00                          4204          DC    AL1(0)                +0A                                04091001
002763 44                          4205          DC    AL1(68)               +0B    XFSCOLON                    04092001
002764 00                          4206          DC    AL1(0)                +0C                                04093001
002765 00                          4207          DC    AL1(0)                +0D                                04094001
002766 00                          4208          DC    AL1(0)                +0E                                04095001
002767 00                          4209          DC    AL1(0)                +0F                                04096001
002768 3C                          4210          DC    AL1(60)               +10    XFEQUAL                     04097001
002769 44                          4211          DC    AL1(68)               +11    XFLT                        04098001
00276A 44                          4212          DC    AL1(68)               +12    XFGT                        04099001
00276B 00                          4213          DC    AL1(0)                +13                                04100001
00276C 00                          4214          DC    AL1(0)                +14                                04101001
00276D 00                          4215          DC    AL1(0)                +15                                04102001
00276E 00                          4216          DC    AL1(0)                +16                                04103001
00276F 00                          4217          DC    AL1(0)                +17                                04104001
002770 00                          4218          DC    AL1(0)                +18                                04105001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                              X390 3.1.04  2012/08/17 13.12

002771 00                          4219          DC    AL1(0)              +19                            04106001
002772 00                          4220          DC    AL1(0)              +1A                            04107001
002773 00                          4221          DC    AL1(0)              +1B                            04108001
002774 00                          4222          DC    AL1(0)              +1C                            04109001
002775 00                          4223          DC    AL1(0)              +1D                            04110001
002776 00                          4224          DC    AL1(0)              +1E                            04111001
002777 00                          4225          DC    AL1(0)              +1F                            04112001
002778 44                          4226          DC    AL1(68)             +20    XFNOT                   04113001
002779 00                          4227          DC    AL1(0)              +21                            04114001
00277A 44                          4228          DC    AL1(68)             +22    XFOR                    04115001
00277B 44                          4229          DC    AL1(68)             +23    XFAMPER                 04116001
00277C 00                          4230          DC    AL1(0)              +24                            04117001
00277D 20                          4231          DC    AL1(32)             +25    XFCOMMA                 04118001
00277E 44                          4232          DC    AL1(68)             +26    XFRBRAC                 04119001
00277F 00                          4233          DC    AL1(0)              +27                            04120001
002780 00                          4234          DC    AL1(0)              +28    XFRSQBR                 04121001
002781 00                          4235          DC    AL1(0)              +29                            04122001
002782 00                          4236          DC    AL1(0)              +2A                            04123001
002783 00                          4237          DC    AL1(0)              +2B    XFBLANK                 04124001
002784 44                          4238          DC    AL1(68)             +2C                            04125001
002785 1C                          4239          DC    AL1(28)             +2D    XFPERIOD                04126001
002786 44                          4240          DC    AL1(68)             +2E    XFQUOTE                 04127001
002787 38                          4241          DC    AL1(56)             +2F                            04128001
002788 40                          4242          DC    AL1(64)             +30    XF0                     04129001
002789 40                          4243          DC    AL1(64)             +31    XF1                     04130001
00278A 40                          4244          DC    AL1(64)             +32    XF2                     04131001
00278B 40                          4245          DC    AL1(64)             +33    XF3                     04132001
00278C 40                          4246          DC    AL1(64)             +34    XF4                     04133001
00278D 40                          4247          DC    AL1(64)             +35    XF5                     04134001
00278E 40                          4248          DC    AL1(64)             +36    XF6                     04135001
00278F 40                          4249          DC    AL1(64)             +37    XF7                     04136001
002790 40                          4250          DC    AL1(64)             +38    XF8                     04137001
002791 40                          4251          DC    AL1(64)             +39    XF9                     04138001
002792 00                          4252          DC    AL1(0)              +3A                            04139001
002793 00                          4253          DC    AL1(0)              +3B                            04140001
002794 00                          4254          DC    AL1(0)              +3C                            04141001
002795 00                          4255          DC    AL1(0)              +3D                            04142001
002796 00                          4256          DC    AL1(0)              +3E                            04143001
002797 00                          4257          DC    AL1(0)              +3F                            04144001
002798 44                          4258          DC    AL1(68)             +40    XFA                     04145001
002799 44                          4259          DC    AL1(68)             +41    XFB                     04146001
00279A 44                          4260          DC    AL1(68)             +42    XFC                     04147001
00279B 44                          4261          DC    AL1(68)             +43    XFD                     04148001
00279C 44                          4262          DC    AL1(68)             +44    XFE                     04149001
00279D 44                          4263          DC    AL1(68)             +45    XFF                     04150001
00279E 44                          4264          DC    AL1(68)             +46    XFG                     04151001
00279F 44                          4265          DC    AL1(68)             +47    XFH                     04152001
0027A0 44                          4266          DC    AL1(68)             +48    XFI                     04153001
0027A1 44                          4267          DC    AL1(68)             +49    XFJ                     04154001
0027A2 44                          4268          DC    AL1(68)             +4A    XFK                     04155001
0027A3 44                          4269          DC    AL1(68)             +4B    XFL                     04156001
0027A4 44                          4270          DC    AL1(68)             +4C    XFM                     04157001
0027A5 44                          4271          DC    AL1(68)             +4D    XFN                     04158001
0027A6 44                          4272          DC    AL1(68)             +4E    XFO                     04159001
0027A7 44                          4273          DC    AL1(68)             +4F    XFP                     04160001
0027A8 44                          4274          DC    AL1(68)             +50    XFQ                     04161001
0027A9 44                          4275          DC    AL1(68)             +51    XFR                     04162001
0027AA 44                          4276          DC    AL1(68)             +52    XFS                     04163001
0027AB 44                          4277          DC    AL1(68)             +53    XFT                     04164001
0027AC 44                          4278          DC    AL1(68)             +54    XFU                     04165001
0027AD 44                          4279          DC    AL1(68)             +55    XFV                     04166001
0027AE 44                          4280          DC    AL1(68)             +56    XFW                     04167001
0027AF 44                          4281          DC    AL1(68)             +57    XFX                     04168001
0027B0 44                          4282          DC    AL1(68)             +58    XFY                     04169001
0027B1 44                          4283          DC    AL1(68)             +59    XFZ                     04170001
0027B2 44                          4284          DC    AL1(68)             +59    XFDOLLAR                04171001
0027B3 44                          4285          DC    AL1(68)             +59    XFUNDER                 04172001
0027B4 44                          4286          DC    AL1(68)             +59    XFHASH                  04173001
0027B5 44                          4287          DC    AL1(68)             +59    XFAT                    04174001
                                   4288 *                                                                 04175001
                                   4289 *        ATABLE                                                   04176001
                                   4290 *                                                                 04177001
                                   4291 *        USED BY THE APOSTROPHE PROGRAM                           04178001
                                   4292 *        GIVES DISPLACEMENTS TO BPRTAB                            04179001
                                   4293 *                                                                 04180001
0027B6 50                          4294 ATABLE   DC    AL1(80)             +00    XFPLUS                  04181001
0027B7 50                          4295          DC    AL1(80)             +01    XFMINUS                 04182001
0027B8 64                          4296          DC    AL1(100)            +02    XFASTER                 04183001
0027B9 00                          4297          DC    AL1(0)              +03    XFSLASH                 04184001
0027BA 00                          4298          DC    AL1(0)              +04                            04185001
0027BB 00                          4299          DC    AL1(0)              +05                            04186001
0027BC 00                          4300          DC    AL1(0)              +06    XFLBRAC                 04187001
0027BD 64                          4301          DC    AL1(100)            +07    XFCOLON                 04188001
0027BE 00                          4302          DC    AL1(0)              +08    XFLSQBR                 04189001
0027BF 00                          4303          DC    AL1(0)              +09                            04190001
0027C0 00                          4304          DC    AL1(0)              +0A                            04191001
0027C1 64                          4305          DC    AL1(100)            +0B    XFSCOLON                04192001
0027C2 00                          4306          DC    AL1(0)              +0C                            04193001
0027C3 00                          4307          DC    AL1(0)              +0D                            04194001
0027C4 00                          4308          DC    AL1(0)              +0E                            04195001
0027C5 00                          4309          DC    AL1(0)              +0F                            04196001
0027C6 64                          4310          DC    AL1(100)            +10    XFEQUAL                 04197001
0027C7 64                          4311          DC    AL1(100)            +11    XFLT                    04198001
0027C8 64                          4312          DC    AL1(100)            +12    XFGT                    04199001
0027C9 00                          4313          DC    AL1(0)              +13                            04200001
0027CA 00                          4314          DC    AL1(0)              +14                            04201001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

0027CB 00                          4315         DC    AL1(0)                 +15                            04202001
0027CC 00                          4316         DC    AL1(0)                 +16                            04203001
0027CD 00                          4317         DC    AL1(0)                 +17                            04204001
0027CE 00                          4318         DC    AL1(0)                 +18                            04205001
0027CF 00                          4319         DC    AL1(0)                 +19                            04206001
0027D0 00                          4320         DC    AL1(0)                 +1A                            04207001
0027D1 00                          4321         DC    AL1(0)                 +1B                            04208001
0027D2 00                          4322         DC    AL1(0)                 +1C                            04209001
0027D3 00                          4323         DC    AL1(0)                 +1D                            04210001
0027D4 00                          4324         DC    AL1(0)                 +1E                            04211001
0027D5 00                          4325         DC    AL1(0)                 +1F                            04212001
0027D6 64                          4326         DC    AL1(100)               +20   XFNOT                    04213001
0027D7 00                          4327         DC    AL1(0)                 +21                            04214001
0027D8 64                          4328         DC    AL1(100)               +22   XFOR                     04215001
0027D9 64                          4329         DC    AL1(100)               +23   XFAMPER                  04216001
0027DA 00                          4330         DC    AL1(0)                 +24                            04217001
0027DB 64                          4331         DC    AL1(100)               +25   XFCOMMA                  04218001
0027DC 64                          4332         DC    AL1(100)               +26   XFRBRAC                  04219001
0027DD 00                          4333         DC    AL1(0)                 +27                            04220001
0027DE 00                          4334         DC    AL1(0)                 +28   XFRSQBR                  04221001
0027DF 00                          4335         DC    AL1(0)                 +29                            04222001
0027E0 00                          4336         DC    AL1(0)                 +2A                            04223001
0027E1 48                          4337         DC    AL1(72)                +2B   XFBLANK                  04224001
0027E2 4C                          4338         DC    AL1(76)                +2C                            04225001
0027E3 64                          4339         DC    AL1(100)               +2D   XFPERIOD                 04226001
0027E4 5C                          4340         DC    AL1(92)                +2E   XFQUOTE                  04227001
0027E5 60                          4341         DC    AL1(96)                +2F                            04228001
0027E6 50                          4342         DC    AL1(80)                +30   XF0                      04229001
0027E7 50                          4343         DC    AL1(80)                +31   XF1                      04230001
0027E8 50                          4344         DC    AL1(80)                +32   XF2                      04231001
0027E9 50                          4345         DC    AL1(80)                +33   XF3                      04232001
0027EA 50                          4346         DC    AL1(80)                +34   XF4                      04233001
0027EB 50                          4347         DC    AL1(80)                +35   XF5                      04234001
0027EC 50                          4348         DC    AL1(80)                +36   XF6                      04235001
0027ED 50                          4349         DC    AL1(80)                +37   XF7                      04236001
0027EE 50                          4350         DC    AL1(80)                +38   XF8                      04237001
0027EF 50                          4351         DC    AL1(80)                +39   XF9                      04238001
0027F0 00                          4352         DC    AL1(0)                 +3A                            04239001
0027F1 00                          4353         DC    AL1(0)                 +3B                            04240001
0027F2 00                          4354         DC    AL1(0)                 +3C                            04241001
0027F3 00                          4355         DC    AL1(0)                 +3D                            04242001
0027F4 00                          4356         DC    AL1(0)                 +3E                            04243001
0027F5 00                          4357         DC    AL1(0)                 +3F                            04244001
0027F6 00                          4358         DC    AL1(0)                 +40   XFA                      04245001
0027F7 00                          4359         DC    AL1(0)                 +41   XFB                      04246001
0027F8 00                          4360         DC    AL1(0)                 +42   XFC                      04247001
0027F9 00                          4361         DC    AL1(0)                 +43   XFD                      04248001
0027FA 00                          4362         DC    AL1(0)                 +44   XFE                      04249001
0027FB 00                          4363         DC    AL1(0)                 +45   XFF                      04250001
0027FC 00                          4364         DC    AL1(0)                 +46   XFG                      04251001
0027FD 00                          4365         DC    AL1(0)                 +47   XFH                      04252001
0027FE 00                          4366         DC    AL1(0)                 +48   XFI                      04253001
0027FF 00                          4367         DC    AL1(0)                 +49   XFJ                      04254001
002800 00                          4368         DC    AL1(0)                 +4A   XFK                      04255001
002801 00                          4369         DC    AL1(0)                 +4B   XFL                      04256001
002802 00                          4370         DC    AL1(0)                 +4C   XFM                      04257001
002803 00                          4371         DC    AL1(0)                 +4D   XFN                      04258001
002804 00                          4372         DC    AL1(0)                 +4E   XFO                      04259001
002805 00                          4373         DC    AL1(0)                 +4F   XFP                      04260001
002806 00                          4374         DC    AL1(0)                 +50   XFQ                      04261001
002807 00                          4375         DC    AL1(0)                 +51   XFR                      04262001
002808 00                          4376         DC    AL1(0)                 +52   XFS                      04263001
002809 00                          4377         DC    AL1(0)                 +53   XFT                      04264001
00280A 00                          4378         DC    AL1(0)                 +54   XFU                      04265001
00280B 00                          4379         DC    AL1(0)                 +55   XFV                      04266001
00280C 00                          4380         DC    AL1(0)                 +56   XFW                      04267001
00280D 00                          4381         DC    AL1(0)                 +57   XFX                      04268001
00280E 00                          4382         DC    AL1(0)                 +58   XFY                      04269001
00280F 00                          4383         DC    AL1(0)                 +59   XFZ                      04270001
002810 00                          4384         DC    AL1(0)                 +5A   XFDOLLAR                 04271001
002811 00                          4385         DC    AL1(0)                 +5B   XFUNDER                  04272001
002812 00                          4386         DC    AL1(0)                 +5C   XFHASH                   04273001
002813 00                          4387         DC    AL1(0)                 +5D   XFAT                     04274001
                                   4388 *                                                                   04275001
                                   4389 *       BTABLE                                                      04276001
                                   4390 *                                                                   04277001
                                   4391 *       BLANK TABLES - SCANS FOR FIRST NONBLANK CHARACTER           04278001
                                   4392 *       USED BY -                                                   04279001
                                   4393 *       BLANK                                                       04280001
                                   4394 *       BLKAPOS BLANK AFTER APOSTROPHE                              04281001
                                   4395 *       READROUT IN TERMINATION                                     04282001
                                   4396 *                                                                   04283001
002814 FF                          4397 BTABLE  DC    X'FF'                  +00   XFPLUS                   04284001
002815 FF                          4398         DC    X'FF'                  +01   XFMINUS                  04285001
002816 FF                          4399         DC    X'FF'                  +02   XFASTER                  04286001
002817 FF                          4400         DC    X'FF'                  +03   XFSLASH                  04287001
002818 00                          4401         DC    X'00'                  +04                            04288001
002819 00                          4402         DC    X'00'                  +05                            04289001
00281A FF                          4403         DC    X'FF'                  +06   XFLBRAC                  04290001
00281B FF                          4404         DC    X'FF'                  +07   XFCOLON                  04291001
00281C FF                          4405         DC    X'FF'                  +08   XFLSQBR                  04292001
00281D 00                          4406         DC    X'00'                  +09                            04293001
00281E 00                          4407         DC    X'00'                  +0A                            04294001
00281F FF                          4408         DC    X'FF'                  +0B   XFSCOLON                 04295001
002820 00                          4409         DC    X'00'                  +0C                            04296001
002821 00                          4410         DC    X'00'                  +0D                            04297001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.12

002822 00                          4411          DC    X'00'              +0E                                04298001
002823 00                          4412          DC    X'00'              +0F                                04299001
002824 FF                          4413          DC    X'FF'              +10   XFEQUAL                      04300001
002825 FF                          4414          DC    X'FF'              +11   XFLT                         04301001
002826 FF                          4415          DC    X'FF'              +12   XFGT                         04302001
002827 00                          4416          DC    X'00'              +13                                04303001
002828 00                          4417          DC    X'00'              +14                                04304001
002829 00                          4418          DC    X'00'              +15                                04305001
00282A 00                          4419          DC    X'00'              +16                                04306001
00282B 00                          4420          DC    X'00'              +17                                04307001
00282C 00                          4421          DC    X'00'              +18                                04308001
00282D 00                          4422          DC    X'00'              +19                                04309001
00282E 00                          4423          DC    X'00'              +1A                                04310001
00282F 00                          4424          DC    X'00'              +1B                                04311001
002830 00                          4425          DC    X'00'              +1C                                04312001
002831 00                          4426          DC    X'00'              +1D                                04313001
002832 00                          4427          DC    X'00'              +1E                                04314001
002833 00                          4428          DC    X'00'              +1F                                04315001
002834 FF                          4429          DC    X'FF'              +20   XFNOT                        04316001
002835 00                          4430          DC    X'00'              +21                                04317001
002836 FF                          4431          DC    X'FF'              +22   XFOR                         04318001
002837 FF                          4432          DC    X'FF'              +23   XFAMPER                      04319001
002838 00                          4433          DC    X'00'              +24                                04320001
002839 FF                          4434          DC    X'FF'              +25   XFCOMMA                      04321001
00283A FF                          4435          DC    X'FF'              +26   XFRBRAC                      04322001
00283B 00                          4436          DC    X'00'              +27                                04323001
00283C FF                          4437          DC    X'FF'              +28   XFRSQBR                      04324001
00283D 00                          4438          DC    X'00'              +29                                04325001
00283E 00                          4439          DC    X'00'              +2A                                04326001
00283F 00                          4440          DC    X'00'              +2B   XFBLANK                      04327001
002840 FF                          4441          DC    X'FF'              +2C                                04328001
002841 FF                          4442          DC    X'FF'              +2D   XFPERIOD                     04329001
002842 FF                          4443          DC    X'FF'              +2E   XFQUOTE                      04330001
002843 FF                          4444          DC    X'FF'              +2F                                04331001
002844 FF                          4445          DC    X'FF'              +30   XF0                          04332001
002845 FF                          4446          DC    X'FF'              +31   XF1                          04333001
002846 FF                          4447          DC    X'FF'              +32   XF2                          04334001
002847 FF                          4448          DC    X'FF'              +33   XF3                          04335001
002848 FF                          4449          DC    X'FF'              +34   XF4                          04336001
002849 FF                          4450          DC    X'FF'              +35   XF5                          04337001
00284A FF                          4451          DC    X'FF'              +36   XF6                          04338001
00284B FF                          4452          DC    X'FF'              +37   XF7                          04339001
00284C FF                          4453          DC    X'FF'              +38   XF8                          04340001
00284D FF                          4454          DC    X'FF'              +39   XF9                          04341001
00284E 00                          4455          DC    X'00'              +3A                                04342001
00284F 00                          4456          DC    X'00'              +3B                                04343001
002850 00                          4457          DC    X'00'              +3C                                04344001
002851 00                          4458          DC    X'00'              +3D                                04345001
002852 00                          4459          DC    X'00'              +3E                                04346001
002853 00                          4460          DC    X'00'              +3F                                04347001
002854 FF                          4461          DC    X'FF'              +40   XFA                          04348001
002855 FF                          4462          DC    X'FF'              +41   XFB                          04349001
002856 FF                          4463          DC    X'FF'              +42   XFC                          04350001
002857 FF                          4464          DC    X'FF'              +43   XFD                          04351001
002858 FF                          4465          DC    X'FF'              +44   XFE                          04352001
002859 FF                          4466          DC    X'FF'              +45   XFF                          04353001
00285A FF                          4467          DC    X'FF'              +46   XFG                          04354001
00285B FF                          4468          DC    X'FF'              +47   XFH                          04355001
00285C FF                          4469          DC    X'FF'              +48   XFI                          04356001
00285D FF                          4470          DC    X'FF'              +49   XFJ                          04357001
00285E FF                          4471          DC    X'FF'              +4A   XFK                          04358001
00285F FF                          4472          DC    X'FF'              +4B   XFL                          04359001
002860 FF                          4473          DC    X'FF'              +4C   XFM                          04360001
002861 FF                          4474          DC    X'FF'              +4D   XFN                          04361001
002862 FF                          4475          DC    X'FF'              +4E   XFO                          04362001
002863 FF                          4476          DC    X'FF'              +4F   XFP                          04363001
002864 FF                          4477          DC    X'FF'              +50   XFQ                          04364001
002865 FF                          4478          DC    X'FF'              +51   XFR                          04365001
002866 FF                          4479          DC    X'FF'              +52   XFS                          04366001
002867 FF                          4480          DC    X'FF'              +53   XFT                          04367001
002868 FF                          4481          DC    X'FF'              +54   XFU                          04368001
002869 FF                          4482          DC    X'FF'              +55   XFV                          04369001
00286A FF                          4483          DC    X'FF'              +56   XFW                          04370001
00286B FF                          4484          DC    X'FF'              +57   XFX                          04371001
00286C FF                          4485          DC    X'FF'              +58   XFY                          04372001
00286D FF                          4486          DC    X'FF'              +59   XFZ                          04373001
00286E FF                          4487          DC    X'FF'              +5A   XFDOLLAR                     04374001
00286F FF                          4488          DC    X'FF'              +5B   XFUNDER                      04375001
002870 FF                          4489          DC    X'FF'              +5C   XFHASH                       04376001
002871 FF                          4490          DC    X'FF'              +5D   XFAT                         04377001
                                   4491 *                                                                    04378001
                                   4492 *        TESTTABL                                                    04379001
                                   4493 *                                                                    04380001
                                   4494 *        USED BY MAIN LOOP SCANNING - GIVES DISPLACEMENTS TO BPRTAB  04381001
                                   4495 *                                                                    04382001
002872 00                          4496 TESTTABL DC    AL1(0)             +00   XFPLUS                       04383001
002873 00                          4497          DC    AL1(0)             +01   XFMINUS                      04384001
002874 04                          4498          DC    AL1(4)             +02   XFASTER                      04385001
002875 08                          4499          DC    AL1(8)             +03   XFSLASH                      04386001
002876 00                          4500          DC    AL1(0)             +04                                04387001
002877 00                          4501          DC    AL1(0)             +05                                04388001
002878 0C                          4502          DC    AL1(12)            +06   XFLBRAC                      04389001
002879 1C                          4503          DC    AL1(28)            +07   XFCOLON                      04390001
00287A 00                          4504          DC    AL1(0)             +08   XFLSQBR                      04391001
00287B 00                          4505          DC    AL1(0)             +09                                04392001
00287C 00                          4506          DC    AL1(0)             +0A                                04393001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

00287D 90                          4507           DC    AL1(144)            +0B   XFSCOLON            04394001
00287E 00                          4508           DC    AL1(0)              +0C                       04395001
00287F 00                          4509           DC    AL1(0)              +0D                       04396001
002880 00                          4510           DC    AL1(0)              +0E                       04397001
002881 00                          4511           DC    AL1(0)              +0F                       04398001
002882 00                          4512           DC    AL1(0)              +10   XFEQUAL             04399001
002883 10                          4513           DC    AL1(16)             +11   XFLT                04400001
002884 14                          4514           DC    AL1(20)             +12   XFGT                04401001
002885 00                          4515           DC    AL1(0)              +13                       04402001
002886 00                          4516           DC    AL1(0)              +14                       04403001
002887 00                          4517           DC    AL1(0)              +15                       04404001
002888 00                          4518           DC    AL1(0)              +16                       04405001
002889 00                          4519           DC    AL1(0)              +17                       04406001
00288A 00                          4520           DC    AL1(0)              +18                       04407001
00288B 00                          4521           DC    AL1(0)              +19                       04408001
00288C 00                          4522           DC    AL1(0)              +1A                       04409001
00288D 00                          4523           DC    AL1(0)              +1B                       04410001
00288E 00                          4524           DC    AL1(0)              +1C                       04411001
00288F 00                          4525           DC    AL1(0)              +1D                       04412001
002890 00                          4526           DC    AL1(0)              +1E                       04413001
002891 00                          4527           DC    AL1(0)              +1F                       04414001
002892 18                          4528           DC    AL1(24)             +20   XFNOT               04415001
002893 00                          4529           DC    AL1(0)              +21                       04416001
002894 00                          4530           DC    AL1(0)              +22   XFOR                04417001
002895 00                          4531           DC    AL1(0)              +23   XFAMPER             04418001
002896 00                          4532           DC    AL1(0)              +24                       04419001
002897 00                          4533           DC    AL1(0)              +25   XFCOMMA             04420001
002898 24                          4534           DC    AL1(36)             +26   XFRBRAC             04421001
002899 00                          4535           DC    AL1(0)              +27                       04422001
00289A 00                          4536           DC    AL1(0)              +28   XFRSQBR             04423001
00289B 00                          4537           DC    AL1(0)              +29                       04424001
00289C 00                          4538           DC    AL1(0)              +2A                       04425001
00289D 28                          4539           DC    AL1(40)             +2B   XFBLANK             04426001
00289E 2C                          4540           DC    AL1(44)             +2C                       04427001
00289F 30                          4541           DC    AL1(48)             +2D   XFPERIOD            04428001
0028A0 34                          4542           DC    AL1(52)             +2E   XFQUOTE             04429001
0028A1 38                          4543           DC    AL1(56)             +2F                       04430001
0028A2 00                          4544           DC    AL1(0)              +30   XF0                 04431001
0028A3 00                          4545           DC    AL1(0)              +31   XF1                 04432001
0028A4 00                          4546           DC    AL1(0)              +32   XF2                 04433001
0028A5 00                          4547           DC    AL1(0)              +33   XF3                 04434001
0028A6 00                          4548           DC    AL1(0)              +34   XF4                 04435001
0028A7 00                          4549           DC    AL1(0)              +35   XF5                 04436001
0028A8 00                          4550           DC    AL1(0)              +36   XF6                 04437001
0028A9 00                          4551           DC    AL1(0)              +37   XF7                 04438001
0028AA 00                          4552           DC    AL1(0)              +38   XF8                 04439001
0028AB 00                          4553           DC    AL1(0)              +39   XF9                 04440001
0028AC 00                          4554           DC    AL1(0)              +3A                       04441001
0028AD 00                          4555           DC    AL1(0)              +3B                       04442001
0028AE 00                          4556           DC    AL1(0)              +3C                       04443001
0028AF 00                          4557           DC    AL1(0)              +3D                       04444001
0028B0 00                          4558           DC    AL1(0)              +3E                       04445001
0028B1 00                          4559           DC    AL1(0)              +3F                       04446001
0028B2 00                          4560           DC    AL1(0)              +40   XFA                 04447001
0028B3 00                          4561           DC    AL1(0)              +41   XFB                 04448001
0028B4 00                          4562           DC    AL1(0)              +42   XFC                 04449001
0028B5 00                          4563           DC    AL1(0)              +43   XFD                 04450001
0028B6 00                          4564           DC    AL1(0)              +44   XFE                 04451001
0028B7 00                          4565           DC    AL1(0)              +45   XFF                 04452001
0028B8 00                          4566           DC    AL1(0)              +46   XFG                 04453001
0028B9 00                          4567           DC    AL1(0)              +47   XFH                 04454001
0028BA 00                          4568           DC    AL1(0)              +48   XFI                 04455001
0028BB 00                          4569           DC    AL1(0)              +49   XFJ                 04456001
0028BC 00                          4570           DC    AL1(0)              +4A   XFK                 04457001
0028BD 00                          4571           DC    AL1(0)              +4B   XFL                 04458001
0028BE 00                          4572           DC    AL1(0)              +4C   XFM                 04459001
0028BF 00                          4573           DC    AL1(0)              +4D   XFN                 04460001
0028C0 00                          4574           DC    AL1(0)              +4E   XFO                 04461001
0028C1 00                          4575           DC    AL1(0)              +4F   XFP                 04462001
0028C2 00                          4576           DC    AL1(0)              +50   XFQ                 04463001
0028C3 00                          4577           DC    AL1(0)              +51   XFR                 04464001
0028C4 00                          4578           DC    AL1(0)              +52   XFS                 04465001
0028C5 00                          4579           DC    AL1(0)              +53   XFT                 04466001
0028C6 00                          4580           DC    AL1(0)              +54   XFU                 04467001
0028C7 00                          4581           DC    AL1(0)              +55   XFV                 04468001
0028C8 00                          4582           DC    AL1(0)              +56   XFW                 04469001
0028C9 00                          4583           DC    AL1(0)              +57   XFX                 04470001
0028CA 00                          4584           DC    AL1(0)              +58   XFY                 04471001
0028CB 00                          4585           DC    AL1(0)              +59   XFZ                 04472001
0028CC 00                          4586           DC    AL1(0)              +5A   XFDOLLAR            04473001
0028CD 00                          4587           DC    AL1(0)              +5B   XFUNDER             04474001
0028CE 00                          4588           DC    AL1(0)              +5C   XFHASH              04475001
0028CF 00                          4589           DC    AL1(0)              +5D   XFAT                04476001
                                   4590 *                                                             04477001
                                   4591 *         ARTABLE                                             04478001
                                   4592 *                                                             04479001
                                   4593 *         USED BY LIST EQUIVALENT TO THE USE OF TESTTABLE BY TESTLOOP  04480001
                                   4594 *         GIVES DISPLACEMENT TO BPRTAB                        04481001
                                   4595 *                                                             04482001
0028D0 00                          4596 ARTABLE   DC    AL1(0)              +00   XFPLUS              04483001
0028D1 00                          4597           DC    AL1(0)              +01   XFMINUS             04484001
0028D2 04                          4598           DC    AL1(4)              +02   XFASTER             04485001
0028D3 88                          4599           DC    AL1(136)            +03   XFSLASH <-------    04486001
0028D4 00                          4600           DC    AL1(0)              +04                  |    04487001
0028D5 00                          4601           DC    AL1(0)              +05                  |    04488001
0028D6 68                          4602           DC    AL1(104)            +06   XFLBRAC <--    |    04489001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.12

0028D7 54                          4603          DC    AL1(84)             +07   XFCOLON   |     |            04490001
0028D8 68                          4604          DC    AL1(104)            +08   XFLSQBR <--     |            04491001
0028D9 00                          4605          DC    AL1(0)              +09                   |            04492001
0028DA 00                          4606          DC    AL1(0)              +0A                   |            04493001
0028DB 58                          4607          DC    AL1(88)             +0B   XFSCOLON        |            04494001
0028DC 00                          4608          DC    AL1(0)              +0C                   |            04495001
0028DD 00                          4609          DC    AL1(0)              +0D                   |            04496001
0028DE 00                          4610          DC    AL1(0)              +0E                   |            04497001
0028DF 00                          4611          DC    AL1(0)              +0F                   |            04498001
0028E0 00                          4612          DC    AL1(0)              +10   XFEQUAL         |            04499001
0028E1 10                          4613          DC    AL1(16)             +11   XFLT            |            04500001
0028E2 14                          4614          DC    AL1(20)             +12   XFGT            |            04501001
0028E3 00                          4615          DC    AL1(0)              +13                   |            04502001
0028E4 00                          4616          DC    AL1(0)              +14                   |            04503001
0028E5 00                          4617          DC    AL1(0)              +15                   |            04504001
0028E6 00                          4618          DC    AL1(0)              +16                   |            04505001
0028E7 00                          4619          DC    AL1(0)              +17                   |            04506001
0028E8 00                          4620          DC    AL1(0)              +18                   |            04507001
0028E9 00                          4621          DC    AL1(0)              +19                   |            04508001
0028EA 00                          4622          DC    AL1(0)              +1A                   |            04509001
0028EB 00                          4623          DC    AL1(0)              +1B                   |            04510001
0028EC 00                          4624          DC    AL1(0)              +1C                   |            04511001
0028ED 00                          4625          DC    AL1(0)              +1D                   |            04512001
0028EE 00                          4626          DC    AL1(0)              +1E                   |            04513001
0028EF 00                          4627          DC    AL1(0)              +1F                   |            04514001
0028F0 18                          4628          DC    AL1(24)             +20   XFNOT           |            04515001
0028F1 00                          4629          DC    AL1(0)              +21                   |            04516001
0028F2 00                          4630          DC    AL1(0)              +22   XFOR            |            04517001
0028F3 00                          4631          DC    AL1(0)              +23   XFAMPER         |            04518001
0028F4 00                          4632          DC    AL1(0)              +24                   |            04519001
0028F5 80                          4633          DC    AL1(128)            +25   XFCOMMA         |            04520001
0028F6 88                          4634          DC    AL1(136)            +26   XFRBRAC         |            04521001
0028F7 00                          4635          DC    AL1(0)              +27                   |            04522001
0028F8 88                          4636          DC    AL1(136)            +28   XFRSQBR <-------             04523001
0028F9 00                          4637          DC    AL1(0)              +29                                04524001
0028FA 00                          4638          DC    AL1(0)              +2A                                04525001
0028FB 28                          4639          DC    AL1(40)             +2B   XFBLANK                      04526001
0028FC 2C                          4640          DC    AL1(44)             +2C                                04527001
0028FD 84                          4641          DC    AL1(132)            +2D   XFPERIOD                     04528001
0028FE 34                          4642          DC    AL1(52)             +2E   XFQUOTE                      04529001
0028FF 38                          4643          DC    AL1(56)             +2F                                04530001
002900 00                          4644          DC    AL1(0)              +30   XF0                          04531001
002901 00                          4645          DC    AL1(0)              +31   XF1                          04532001
002902 00                          4646          DC    AL1(0)              +32   XF2                          04533001
002903 00                          4647          DC    AL1(0)              +33   XF3                          04534001
002904 00                          4648          DC    AL1(0)              +34   XF4                          04535001
002905 00                          4649          DC    AL1(0)              +35   XF5                          04536001
002906 00                          4650          DC    AL1(0)              +36   XF6                          04537001
002907 00                          4651          DC    AL1(0)              +37   XF7                          04538001
002908 00                          4652          DC    AL1(0)              +38   XF8                          04539001
002909 00                          4653          DC    AL1(0)              +39   XF9                          04540001
00290A 00                          4654          DC    AL1(0)              +3A                                04541001
00290B 00                          4655          DC    AL1(0)              +3B                                04542001
00290C 00                          4656          DC    AL1(0)              +3C                                04543001
00290D 00                          4657          DC    AL1(0)              +3D                                04544001
00290E 00                          4658          DC    AL1(0)              +3E                                04545001
00290F 00                          4659          DC    AL1(0)              +3F                                04546001
002910 00                          4660          DC    AL1(0)              +40   XFA                          04547001
002911 00                          4661          DC    AL1(0)              +41   XFB                          04548001
002912 00                          4662          DC    AL1(0)              +42   XFC                          04549001
002913 00                          4663          DC    AL1(0)              +43   XFD                          04550001
002914 00                          4664          DC    AL1(0)              +44   XFE                          04551001
002915 00                          4665          DC    AL1(0)              +45   XFF                          04552001
002916 00                          4666          DC    AL1(0)              +46   XFG                          04553001
002917 00                          4667          DC    AL1(0)              +47   XFH                          04554001
002918 00                          4668          DC    AL1(0)              +48   XFI                          04555001
002919 00                          4669          DC    AL1(0)              +49   XFJ                          04556001
00291A 00                          4670          DC    AL1(0)              +4A   XFK                          04557001
00291B 00                          4671          DC    AL1(0)              +4B   XFL                          04558001
00291C 00                          4672          DC    AL1(0)              +4C   XFM                          04559001
00291D 00                          4673          DC    AL1(0)              +4D   XFN                          04560001
00291E 00                          4674          DC    AL1(0)              +4E   XFO                          04561001
00291F 00                          4675          DC    AL1(0)              +4F   XFP                          04562001
002920 00                          4676          DC    AL1(0)              +50   XFQ                          04563001
002921 00                          4677          DC    AL1(0)              +51   XFR                          04564001
002922 00                          4678          DC    AL1(0)              +52   XFS                          04565001
002923 00                          4679          DC    AL1(0)              +53   XFT                          04566001
002924 00                          4680          DC    AL1(0)              +54   XFU                          04567001
002925 00                          4681          DC    AL1(0)              +55   XFV                          04568001
002926 00                          4682          DC    AL1(0)              +56   XFW                          04569001
002927 00                          4683          DC    AL1(0)              +57   XFX                          04570001
002928 00                          4684          DC    AL1(0)              +58   XFY                          04571001
002929 00                          4685          DC    AL1(0)              +59   XFZ                          04572001
00292A 00                          4686          DC    AL1(0)              +5A   XFDOLLAR                     04573001
00292B 00                          4687          DC    AL1(0)              +5B   XFUNDER                      04574001
00292C 00                          4688          DC    AL1(0)              +5C   XFHASH                       04575001
00292D 00                          4689          DC    AL1(0)              +5D   XFAT                         04576001
                                   4690 *                                                                     04577001
                                   4691 *        TRINTEXT                                                     04578001
                                   4692 *                                                                     04579001
                                   4693 *        CONVERT TABLE FOR INTERNAL CODE TO EBCDIC                    04580001
                                   4694 *                                                                     04581001
                                   4695 *        USED BY CODE TO TRANSLATE PROCEDURE NAME PROCEDURE TO        04582001
                                   4696 *        TRANSLATE PROCEDURE NAME FOR ESD CARD IF PRECOMPILED         04583001
                                   4697 *        SPECIFIED                                                    04584001
                                   4698 *                                                                     04585001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.12

00292E 4040404040404040             4699 TRINTEXT DC    96C' '                                               04586001
00298E                 0298E 02959  4700          ORG   TRINTEXT+XFBLANK                                     04587001
002959 40                           4701          DC    C' '                                                 04588001
00295A                 0295A 0295E  4702          ORG   TRINTEXT+XF0                                         04589001
00295E F0F1F2F3F4F5F6F7             4703          DC    C'0123456789'                                        04590001
002968                 02968 0296E  4704          ORG   TRINTEXT+XFA                                         04591001
00296E C1C2C3C4C5C6C7C8             4705          DC    C'ABCDEFGHIJKLMNOPQRSTUVWXYZ'                        04592001
002988                 02988 02988  4706          ORG   TRINTEXT+XFDOLLAR                                    04593001
002988 5B6D7B7C                     4707          DC    C'$_#@'                                              04594001
00298C                 0298C 0298E  4708          ORG                                                        04595001
                                    4709 *                                                                   04596001
                                    4710 *        KWLUTAB                                                    04597001
                                    4711 *                                                                   04598001
                                    4712 *        USED TO REFERENCE ENTRIES IN KEYWTAB FOR KEYWORDS          04599001
                                    4713 *                                                                   04600001
00298E 0000
002990 000029B8                     4714 KWLUTAB  DC    A(KEYWDL01)            KEY WORDS LENGTH OF 1         04601001
002994 000029C1                     4715          DC    A(KEYWDL02)            KEY WORDS LENGTH OF 2         04602001
002998 000029D1                     4716          DC    A(KEYWDL03)            KEY WORDS LENGTH OF 3         04603001
00299C 000029EA                     4717          DC    A(KEYWDL04)            KEY WORDS LENGTH OF 4         04604001
0029A0 00002A2A                     4718          DC    A(KEYWDL05)            KEY WORDS LENGTH OF 5         04605001
0029A4 00002A7B                     4719          DC    A(KEYWDL06)            KEY WORDS LENGTH OF 6         04606001
0029A8 00002A8E                     4720          DC    A(KEYWDL07)            KEY WORDS LENGTH OF 7         04607001
0029AC 00002AC1                     4721          DC    A(KEYWDL08)            KEY WORDS LENGTH OF 8         04608001
0029B0 00002ACD                     4722          DC    A(KEYWDL09)            KEY WORDS LENGTH OF 9         04609001
0029B4 00002ADA                     4723          DC    A(KEYWDL10)            KEY WORDS LENGTH OF 10        04610001
                                    4724 *                                                                   04611001
                                    4725 *        KEYWTAB                                                    04612001
                                    4726 *                                                                   04613001
                                    4727 *        CONTAINS ALL KEYWORDS, EACH FOLLOWED BY 3 BYTES OF         04614001
                                    4728 *        INFORMATION BEING 2 BYTES OF CHARACTERISTICS AND A         04615001
                                    4729 *        DISPLACEMENT INTO DELPRGTB                                 04616001
                                    4730 *        FOR A SECTION IN THE KEYWTAB. A SECTION CONTAINS           04617001
                                    4731 *        ALL THE KEYWORDS OF THE SAME LENGTH                        04618001
                                    4732 *        1. THE FIRST BYTE IN EACH SECTION SAYS HOW MANY ENTRIES    04619001
                                    4733 *           THERE ARE IN THE SECTION. THEREAFTER THE DELIMITER PLUS 3 04620001
                                    4734 *           BYTES OF INTERNAL CODE MAKES A SUBSECTION               04621001
                                    4735 *        2. THE FIRST 2 BYTES OF THE INTERNAL CODE IS               04622001
                                    4736 *           CHARECTERISTCS FOR THE DELIMITER                        04623001
                                    4737 *        3. THE THIRD BYTE IS A DISPLACEMENT TO THE DELPRGTB,       04624001
                                    4738 *           WHERE THE ADDR IS PICKED UP TO THE PROGRAM TO HANDLE    04625001
                                    4739 *           THE KEYWORD                                             04626001
                                    4740 *                                                                   04627001
                       029B8        4741 KEYWTAB  EQU   *                                                    04628001
0029B8 02                           4742 KEYWDL01 DC    AL1(2)                 NUMBER OF ENTRIES             04629001
                                    4743          IEXCGEN DC,'/'               /                             04630001
0029B9 03                           4744+         DC    X'03'                                                01-IEXCG
0029BA 040000                       4745          DC    XL2'0400',XL1'00'                                    04631001
                                    4746          IEXCGEN DC,'('               (                             04632001
0029BD 06                           4747+         DC    X'06'                                                01-IEXCG
0029BE 000004                       4748          DC    XL2'0000',XL1'04'      LEFT BRACKET (STRING)         04633001
                                    4749 *                                                                   04634001
0029C1 03                           4750 KEYWDL02 DC    AL1(3)                 NUMBER OF ENTRIES             04635001
                                    4751          IEXCGEN DC,'DO'              DO                            04636001
0029C2 434E                         4752+         DC    X'434E'                                              01-IEXCG
0029C4 1C0008                       4753          DC    XL2'1C00',XL1'08'                                    04637001
                                    4754          IEXCGEN DC,'IF'              IF                            04638001
0029C7 4845                         4755+         DC    X'4845'                                              01-IEXCG
0029C9 1D000C                       4756          DC    XL2'1D00',XL1'0C'                                    04639001
                                    4757          IEXCGEN DC,'OR'              OR                            04640001
0029CC 4E51                         4758+         DC    X'4E51'                                              01-IEXCG
0029CE 220000                       4759          DC    XL2'2200',XL1'00'                                    04641001
                                    4760 *                                                                   04642001
0029D1 04                           4761 KEYWDL03 DC    AL1(4)                 NUMBER OF ENTRIES             04643001
                                    4762 KWEND    IEXCGEN DC,'END'             END                           04644001
0029D2 444D43                       4763+KWEND    DC    X'444D43'                                            01-IEXCG
0029D5 000010                       4764          DC    XL2'0000',XL1'10'                                    04645001
                                    4765          IEXCGEN DC,'FOR'             FOR                           04646001
0029D8 454E51                       4766+         DC    X'454E51'                                            01-IEXCG
0029DB 000014                       4767          DC    XL2'0000',XL1'14'                                    04647001
                                    4768          IEXCGEN DC,'AND'             AND                           04648001
0029DE 404D43                       4769+         DC    X'404D43'                                            01-IEXCG
0029E1 230000                       4770          DC    XL2'2300',XL1'00'                                    04649001
                                    4771          IEXCGEN DC,'NOT'             NOT                           04650001
0029E4 4D4E53                       4772+         DC    X'4D4E53'                                            01-IEXCG
0029E7 200000                       4773          DC    XL2'2000',XL1'00'                                    04651001
                                    4774 *                                                                   04652001
0029EA 09                           4775 KEYWDL04 DC    AL1(9)                 NUMBER OF ENTRIES             04653001
                                    4776          IEXCGEN DC,'REAL'            REAL                          04654001
0029EB 5144404B                     4777+         DC    X'5144404B'                                          01-IEXCG
0029EF C21218                       4778          DC    XL2'C212',XL1'18'                                    04655001
                                    4779          IEXCGEN DC,'STEP'            STEP                          04656001
0029F2 5253444F                     4780+         DC    X'5253444F'                                          01-IEXCG
0029F6 190000                       4781          DC    XL2'1900',XL1'00'                                    04657001
                                    4782          IEXCGEN DC,'THEN'            THEN                          04658001
0029F9 5347444D                     4783+         DC    X'5347444D'                                          01-IEXCG
0029FD 1E0008                       4784          DC    XL2'1E00',XL1'08'                                    04659001
                                    4785 KWELSE   IEXCGEN DC,'ELSE'            ELSE                          04660001
002A00 444B5244                     4786+KWELSE   DC    X'444B5244'                                          01-IEXCG
002A04 1F0008                       4787          DC    XL2'1F00',XL1'08'                                    04661001
                                    4788          IEXCGEN DC,'GOTO'            GOTO                          04662001
002A07 464E534E                     4789+         DC    X'464E534E'                                          01-IEXCG
002A0B 17000C                       4790          DC    XL2'1700',XL1'0C'                                    04663001
                                    4791          IEXCGEN DC,'TRUE'            TRUE                          04664001
002A0E 53515444                     4792+         DC    X'53515444'                                          01-IEXCG
002A12 07001C                       4793          DC    XL2'0700',XL1'1C'                                    04665001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.12

                                    4794          IEXCGEN DC,'LESS'          LESS                              04666001
002A15 4B445252                     4795+         DC     X'4B445252'                                           01-IEXCG
002A19 110000                       4796          DC     XL2'1100',XL1'00'                                     04667001
                                    4797          IEXCGEN DC,'CODE'          CODE                              04668001
002A1C 424E4344                     4798+         DC     X'424E4344'                                           01-IEXCG
002A20 000020                       4799          DC     XL2'0000',XL1'20'                                     04669001
                                    4800          IEXCGEN DC,'IMPL'          IMPL                              04670001
002A23 484C4F4B                     4801+         DC     X'484C4F4B'                                           01-IEXCG
002A27 210000                       4802          DC     XL2'2100',XL1'00'                                     04671001
                                    4803 *                                                                     04672001
002A2A 0A                           4804 KEYWDL05 DC     AL1(10)             NUMBER OF ENTRIES                 04673001
                                    4805          IEXCGEN DC,'BEGIN'         BEGIN                             04674001
002A2B 414446484D                   4806+         DC     X'414446484D'                                         01-IEXCG
002A30 000024                       4807          DC     XL2'0000',XL1'24'                                     04675001
                                    4808          IEXCGEN DC,'UNTIL'         UNTIL                             04676001
002A33 544D53484B                   4809+         DC     X'544D53484B'                                         01-IEXCG
002A38 1A0000                       4810          DC     XL2'1A00',XL1'00'                                     04677001
                                    4811 KWARRAY  IEXCGEN DC,'ARRAY'         ARRAY                             04678001
002A3B 4051514058                   4812+KWARRAY  DC     X'4051514058'                                         01-IEXCG
002A40 CA1628                       4813          DC     XL2'CA16',XL1'28'                                     04679001
                                    4814          IEXCGEN DC,'VALUE'         VALUE                             04680001
002A43 55404B5444                   4815+         DC     X'55404B5444'                                         01-IEXCG
002A48 00002C                       4816          DC     XL2'0000',XL1'2C'                                     04681001
                                    4817          IEXCGEN DC,'LABEL'         LABEL                             04682001
002A4B 4B4041444B                   4818+         DC     X'4B4041444B'                                         01-IEXCG
002A50 CA1830                       4819          DC     XL2'CA18',XL1'30'                                     04683001
                                    4820          IEXCGEN DC,'WHILE'         WHILE                             04684001
002A53 5647484B44                   4821+         DC     X'5647484B44'                                         01-IEXCG
002A58 1B0000                       4822          DC     XL2'1B00',XL1'00'                                     04685001
                                    4823          IEXCGEN DC,'FALSE'         FLASE                             04686001
002A5B 45404B5244                   4824+         DC     X'45404B5244'                                         01-IEXCG
002A60 00001C                       4825          DC     XL2'0000',XL1'1C'                                     04687001
                                    4826          IEXCGEN DC,'POWER'         POWER                             04688001
002A63 4F4E564451                   4827+         DC     X'4F4E564451'                                         01-IEXCG
002A68 050000                       4828          DC     XL2'0500',XL1'00'                                     04689001
                                    4829          IEXCGEN DC,'EQUAL'         EQUAL                             04690001
002A6B 445054404B                   4830+         DC     X'445054404B'                                         01-IEXCG
002A70 100000                       4831          DC     XL2'1000',XL1'00'                                     04691001
                                    4832          IEXCGEN DC,'EQUIV'         EQUIV                             04692001
002A73 4450544855                   4833+         DC     X'4450544855'                                         01-IEXCG
002A78 240000                       4834          DC     XL2'2400',XL1'00'                                     04693001
                                    4835 *                                                                     04694001
002A7B 02                           4836 KEYWDL06 DC     AL1(2)              NUMBER OF ENTRIES                 04695001
                                    4837          IEXCGEN DC,'SWITCH'        SWITCH                            04696001
002A7C 525648534247                 4838+         DC     X'525648534247'                                       01-IEXCG
002A82 CA1C34                       4839          DC     XL2'CA1C',XL1'34'                                     04697001
                                    4840          IEXCGEN DC,'STRING'        STRING                            04698001
002A85 525351484D46                 4841+         DC     X'525351484D46'                                       01-IEXCG
002A8B CB1030                       4842          DC     XL2'CB10',XL1'30'                                     04699001
                                    4843 *                                                                     04700001
002A8E 05                           4844 KEYWDL07 DC     AL1(5)                                                04701001
                                    4845          IEXCGEN DC,'INTEGER'       INTEGER                           04702001
002A8F 484D5344464451               4846+         DC     X'484D5344464451'                                     01-IEXCG
002A96 C21118                       4847          DC     XL2'C211',XL1'18'                                     04703001
                                    4848          IEXCGEN DC,'BOOLEAN'       BOOLEAN                           04704001
002A99 414E4E4B44404D               4849+         DC     X'414E4E4B44404D'                                     01-IEXCG
002AA0 C21318                       4850          DC     XL2'C213',XL1'18'                                     04705001
                                    4851          IEXCGEN DC,'COMMENT'       COMMENT                           04706001
002AA3 424E4C4C444D53               4852+         DC     X'424E4C4C444D53'                                     01-IEXCG
002AAA 000038                       4853          DC     XL2'0000',XL1'38'                                     04707001
                                    4854          IEXCGEN DC,'NOTLESS'       NOTLESS                           04708001
002AAD 4D4E534B445252               4855+         DC     X'4D4E534B445252'                                     01-IEXCG
002AB4 150000                       4856          DC     XL2'1500',XL1'00'                                     04709001
                                    4857          IEXCGEN DC,'GREATER'       GREATER                           04710001
002AB7 46514440534451               4858+         DC     X'46514440534451'                                     01-IEXCG
002ABE 120000                       4859          DC     XL2'1200',XL1'00'                                     04711001
                                    4860 *                                                                     04712001
002AC1 01                           4861 KEYWDL08 DC     AL1(1)              NUMBER OF ENTRIES                 04713001
                                    4862          IEXCGEN DC,'NOTEQUAL'      NOTEQUAL                          04714001
002AC2 4D4E53445054404B             4863+         DC     X'4D4E53445054404B'                                   01-IEXCG
002ACA 130000                       4864          DC     XL2'1300',XL1'00'                                     04715001
                                    4865 *                                                                     04716001
002ACD 01                           4866 KEYWDL09 DC     AL1(1)              NUMBER OF ENTRIES                 04717001
                                    4867 KWPROC   IEXCGEN DC,'PROCEDURE'     PROCEDURE                         04718001
002ACE 4F514E4244435451             4868+KWPROC   DC     X'4F514E424443545144'                                 01-IEXCG
002AD7 CAD03C                       4869          DC     XL2'CAD0',XL1'3C'                                     04719001
                                    4870 *                                                                     04720001
002ADA 01                           4871 KEYWDL10 DC     AL1(1)              NUMBER OF ENTRIES                 04721001
                                    4872          IEXCGEN DC,'NOTGREATER'    NOTGREATER                        04722001
002ADB 4D4E534651444053             4873+         DC     X'4D4E5346514440534451'                               01-IEXCG
002AE5 140000                       4874          DC     XL2'1400',XL1'00'                                     04723001
                                    4875 *                                                                     04724001
                                    4876 *        DELPRGTB                                                     04725001
                                    4877 *                                                                     04726001
                                    4878 *        BRANCH ADDR TABLE USED AFTER A KEYWORD HAS BEEN FOUND        04727001
                                    4879 *                                                                     04728001
002AE8 00000CAE                     4880 DELPRGTB DC     A(NORMAL)           +00                               04729001
002AEC 00001D70                     4881          DC     A(STRING)           +04                               04730001
002AF0 00000D02                     4882          DC     A(TED)              +08                               04731001
002AF4 00000CE8                     4883          DC     A(GIF)              +12                               04732001
002AF8 00000E82                     4884          DC     A(END)              +16                               04733001
002AFC 000013C4                     4885          DC     A(FOR)              +20                               04734001
002B00 00001496                     4886          DC     A(TYPE)             +24                               04735001
002B04 00000CC6                     4887          DC     A(BOLCON)           +28                               04736001
002B08 000015EE                     4888          DC     A(CODE)             +32                               04737001
002B0C 00000D3A                     4889          DC     A(BEGIN)            +36                               04738001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.12

002B10 00001866                      4890          DC    A(ARRAY)                +40                              04739001
002B14 000017E4                      4891          DC    A(VALUE)                +44                              04740001
002B18 00001692                      4892          DC    A(SPEC)                 +48                              04741001
002B1C 00001C28                      4893          DC    A(SWITCH)               +52                              04742001
002B20 00001338                      4894          DC    A(COM)                  +56                              04743001
002B24 00001F28                      4895          DC    A(PROCEDUR)             +60                              04744001
002B28 0000182E                      4896          DC    A(TYPEARRY)             +64                              04745001
002B2C 00001EE4                      4897          DC    A(TYPPROC)              +68                              04746001
                                     4898 *                                                                       04747001
                                     4899 *        COMTABLE                                                       04748001
                                     4900 *                                                                       04749001
                                     4901 *        USED BY COMMENT PROGRAM                                        04750001
                                     4902 *        TESTS FOR SEMICOLON, PERIOD, QUOTE AND ZETA                    04751001
                                     4903 *        GIVES DISPLACEMENT TO PROGRAMS FROM COMCEE2+2                  04752001
                                     4904 *                                                                       04753001
002B30 0000000000000000              4905 COMTABLE DC    XL96'00'                                                 04754001
002B90                02B90 02B3B    4906          ORG   COMTABLE+XFSCOLON                                        04755001
002B3B 2A                            4907          DC    AL1(42)                 COMCEE2+2+42                     04756001
002B3C                02B3C 02B5D    4908          ORG   COMTABLE+XFPERIOD                                        04757001
002B5D 22                            4909          DC    AL1(34)                 COMCEE2+2+34                     04758001
002B5E                02B5E 02B5E    4910          ORG   COMTABLE+XFQUOTE                                         04759001
002B5E 0E                            4911          DC    AL1(14)                 COMCEE2+2+14                     04760001
002B5F                02B5F 02B5F    4912          ORG   COMTABLE+XFZETA                                          04761001
002B5F 1E                            4913          DC    AL1(30)                 COMCEE2+2+30                     04762001
002B60                02B60 02B90    4914          ORG   ,                                                        04763001
                                     4915 *                                                                       04764001
                                     4916 *        STRTABLE                                                       04765001
                                     4917 *                                                                       04766001
                                     4918 *        USED BY STRING PROGRAM                                         04767001
                                     4919 *        SCANS FOR QUOTE OR ZETA                                        04768001
                                     4920 *        PROVIDES DISPLACEMENTS TO BPRTAB                               04769001
                                     4921 *                                                                       04770001
002B90 0000000000000000              4922 STRTABLE DC    XL96'00'                                                 04771001
002BF0                02BF0 02BBE    4923          ORG   STRTABLE+XFQUOTE                                         04772001
002BBE 8C                            4924          DC    AL1(140)                                                 04773001
002BBF                02BBF 02BBF    4925          ORG   STRTABLE+XFZETA                                          04774001
002BBF 38                            4926          DC    AL1(56)                                                  04775001
002BC0                02BC0 02BF0    4927          ORG   ,                                                        04776001
                                     4928 *                                                                       04777001
                                     4929 *        KEYTAB                                                         04778001
                                     4930 *                                                                       04779001
                                     4931 *        USED BY TRANSOP                                                04780001
                                     4932 *        BYTE 3 IS EXPECTED BYTE, IF THAT ONE MATCHES CHAR IN           04781001
                                     4933 *        INPUT BYTE 1 IS PUT OUT OTHERWISE BYTE 2                       04782001
                                     4934 *        THE DISPLACEMENT FROM TESTTABL OR ATABLE IS USED TO GET        04783001
                                     4935 *        THE APPROPRIATE ENTRY IN KEYTAB                                04784001
                                     4936 *        USED WHEN -                                                    04785001
                                     4937 *                   FOUND                     EXPECTED                  04786001
                                     4938 *                   *                         *                         04787001
                                     4939 *                   /                         )                         04788001
                                     4940 *                   (                         /                         04789001
                                     4941 *                   <                         =                         04790001
                                     4942 *                   >                         =                         04791001
                                     4943 *                   ¬                         =                         04792001
                                     4944 *                                                                       04793001
002BF0 00000000                      4945 KEYTAB   DC    X'00000000'                                 +00          04794001
002BF4 00050202                      4946          DC    X'00',AL1(XFPOWER),AL1(XFASTER),AL1(XFASTER) +04 XFASTER  04795001
002BF8 00280326                      4947          DC    X'00',AL1(XFRSQBR),AL1(XFSLASH),AL1(XFRBRAC) +08 XFSLASH  04796001
002BFC 00080603                      4948          DC    X'00',AL1(XFLSQBR),AL1(XFLBRAC),AL1(XFSLASH) +12 XFLBRAC  04797001
002C00 00141110                      4949          DC    X'00',AL1(20),AL1(XFLT),AL1(XFEQUAL)        +16 XFLT     04798001
002C04 00151210                      4950          DC    X'00',AL1(21),AL1(XFGT),AL1(XFEQUAL)        +20 XFGT     04799001
002C08 00132010                      4951          DC    X'00',AL1(19),AL1(XFNOT),AL1(XFEQUAL)       +24 XFNOT    04800001
                                     4952 *                                                                       04801001
                                     4953 *        TREXTINT                                                       04802001
                                     4954 *                                                                       04803001
                                     4955 *        USED IN CIB TO TRANSLATE FROM EBCDIC TO INTERNAL CODE          04804001
                                     4956 *                                                                       04805001
002C0C 2C2C2C2C2C2C2C2C              4957 TREXTINT DC    256AL1(XFEND)                                            04806001
002D0C                02D0C 02C4C    4958          ORG   TREXTINT+C' '                                            04807001
002C4C 2B                            4959          DC    AL1(XFBLANK)                                             04808001
002C4D                02C4D 02C57    4960          ORG   TREXTINT+C'.'                                            04809001
002C57 2D110600                      4961          DC    AL1(XFPERIOD),AL1(XFLT),AL1(XFLBRAC),AL1(XFPLUS)         04810001
002C5B 2223                          4962          DC    AL1(XFOR),AL1(XFAMPER)                                   04811001
002C5D                02C5D 02C67    4963          ORG   TREXTINT+C'$'                                            04812001
002C67 5A                            4964          DC    AL1(XFDOLLAR)                                            04813001
002C68                02C68 02C68    4965          ORG   TREXTINT+C'*'                                            04814001
002C68 02260B20                      4966          DC    AL1(XFASTER),AL1(XFRBRAC),AL1(XFSCOLON),AL1(XFNOT)       04815001
002C6C 0103                          4967          DC    AL1(XFMINUS),AL1(XFSLASH)                                04816001
002C6E                02C6E 02C77    4968          ORG   TREXTINT+C','                                            04817001
002C77 25                            4969          DC    AL1(XFCOMMA)                                             04818001
002C78                02C78 02C79    4970          ORG   TREXTINT+C'_'                                            04819001
002C79 5B                            4971          DC    AL1(XFUNDER)                                             04820001
002C7A                02C7A 02C7A    4972          ORG   TREXTINT+C'>'                                            04821001
002C7A 12                            4973          DC    AL1(XFGT)                                                04822001
002C7B                02C7B 02C86    4974          ORG   TREXTINT+C':'                                            04823001
002C86 07                            4975          DC    AL1(XFCOLON)                                             04824001
002C87                02C87 02C87    4976          ORG   TREXTINT+C'#'                                            04825001
002C87 5C5D                          4977          DC    AL1(XFHASH),AL1(XFAT)                                    04826001
002C89                02C89 02C89    4978          ORG   TREXTINT+C''''                                           04827001
002C89 2E10                          4979          DC    AL1(XFQUOTE),AL1(XFEQUAL)                                04828001
002C8B                02C8B 02C8D    4980          ORG   TREXTINT+X'81'          LOWER CASE A                     04829001
002C8D 404142434445                  4981          DC    AL1(XFA),AL1(XFB),AL1(XFC),AL1(XFD),AL1(XFE),AL1(XFF)    04830001
002C93 464748                        4982          DC    AL1(XFG),AL1(XFH),AL1(XFI)                               04831001
002C96                02C96 02C9D    4983          ORG   TREXTINT+X'91'          LOWER CASE J                     04832001
002C9D 494A4B4C4D4E                  4984          DC    AL1(XFJ),AL1(XFK),AL1(XFL),AL1(XFM),AL1(XFN),AL1(XFO)    04833001
002CA3 4F5051                        4985          DC    AL1(XFP),AL1(XFQ),AL1(XFR)                               04834001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.12

002CA6                  02CA6 02CAE  4986          ORG   TREXTINT+X'A2'         LOWER CASE S               04835001
002CAE 525354555657                  4987          DC    AL1(XFS),AL1(XFT),AL1(XFU),AL1(XFV),AL1(XFW),AL1(XFX)  04836001
002CB4 5859                          4988          DC    AL1(XFY),AL1(XFZ)                                 04837001
002CB6                  02CB6 02CB9  4989          ORG   TREXTINT+C'['                                     04838001
002CB9 08                            4990          DC    AL1(XFLSQBR)                                      04839001
002CBA                  02CBA 02CC9  4991          ORG   TREXTINT+C']'                                     04840001
002CC9 28                            4992          DC    AL1(XFRSQBR)                                      04841001
002CCA                  02CCA 02CCD  4993          ORG   TREXTINT+C'A'                                     04842001
002CCD 404142434445                  4994          DC    AL1(XFA),AL1(XFB),AL1(XFC),AL1(XFD),AL1(XFE),AL1(XFF)  04843001
002CD3 464748                        4995          DC    AL1(XFG),AL1(XFH),AL1(XFI)                        04844001
002CD6                  02CD6 02CDD  4996          ORG   TREXTINT+C'J'                                     04845001
002CDD 494A4B4C4D4E                  4997          DC    AL1(XFJ),AL1(XFK),AL1(XFL),AL1(XFM),AL1(XFN),AL1(XFO)  04846001
002CE3 4F5051                        4998          DC    AL1(XFP),AL1(XFQ),AL1(XFR)                        04847001
002CE6                  02CE6 02CEE  4999          ORG   TREXTINT+C'S'                                     04848001
002CEE 525354555657                  5000          DC    AL1(XFS),AL1(XFT),AL1(XFU),AL1(XFV),AL1(XFW),AL1(XFX)  04849001
002CF4 5859                          5001          DC    AL1(XFY),AL1(XFZ)                                 04850001
002CF6                  02CF6 02CFC  5002          ORG   TREXTINT+C'0'                                     04851001
002CFC 303132333435                  5003          DC    AL1(XF0),AL1(XF1),AL1(XF2),AL1(XF3),AL1(XF4),AL1(XF5)  04852001
002D02 36373839                      5004          DC    AL1(XF6),AL1(XF7),AL1(XF8),AL1(XF9)               04853001
002D06                  02D06 02D0C  5005          ORG   ,                      RESTORE LOCATION COUNTER   04854001
                                     5006 *                                                            04855001
                                     5007 *        KFCONST                                             04856001
                                     5008 *                                                            04857001
                                     5009 *        KEEPS THE CONSTANTS 0 THROUGH 15                    04858001
                                     5010 *        THE CONSTANTS ARE USED WITHIN SCAN 1/2 FOR CALCULATION  04859001
                                     5011 *        AND ARE THEN INSERTED AS THE FIRST 64 BYTES OF THE  04860001
                                     5012 *        CONSTANT POOL                                       04861001
                                     5013 *                                                            04862001
002D0C                               5014 KFCONST  DC    0F'0'                                         04863001
002D0C 00000000                      5015 KF0      DC    F'0'                   +00                        04864001
002D10 00000001                      5016 KF1      DC    F'1'                   +04                        04865001
002D14 00000002                      5017 KF2      DC    F'2'                   +08                        04866001
002D18 00000003                      5018 KF3      DC    F'3'                   +12                        04867001
002D1C 00000004                      5019 KF4      DC    F'4'                   +16                        04868001
002D20 00000005                      5020 KF5      DC    F'5'                   +20                        04869001
002D24 00000006                      5021 KF6      DC    F'6'                   +24                        04870001
002D28 00000007                      5022 KF7      DC    F'7'                   +28                        04871001
002D2C 00000008                      5023 KF8      DC    F'8'                   +32                        04872001
002D30 00000009                      5024 KF9      DC    F'9'                   +36                        04873001
002D34 0000000A                      5025 KF10     DC    F'10'                  +40                        04874001
002D38 0000000B                      5026 KF11     DC    F'11'                  +44                        04875001
002D3C 0000000C                      5027 KF12     DC    F'12'                  +48                        04876001
002D40 0000000D                      5028 KF13     DC    F'13'                  +52                        04877001
002D44 0000000E                      5029 KF14     DC    F'14'                  +56                        04878001
002D48 0000000F                      5030 KF15     DC    F'15'                  +60                        04879001
                                     5031 *                                                            04880001
                                     5032 *        VARIABLES AND CONSTANTS                             04881001
                                     5033 *                                                            04882001
002D4C 000061A8                      5034 KF25000  DC    F'25000'                                      04883001
002D50 000007D0                      5035 KF2000   DC    F'2000'                                       04884001
002D54 00000FFF                      5036 KF4095   DC    F'4095'                                       04885001
002D58 1000                          5037 KH4096   DC    H'4096'                                       04886001
002D5A 000000000000
002D60 0000000000000000              5038 DOUBLE   DC    D'0'                                          04887001
002D68 00000100                      5039 KF256    DC    F'256'                                        04888001
002D6C 2EC8030000                    5040 INT      DC    X'2EC8030000'          COMMON PART OF THE INTERNAL  04889001
                                     5041 *                                 NAMES OF BOOLEAN CONSTANTS   04890001
002D71 00
002D72 0000                          5042 ENDCOUNT DC    H'0'                                          04891001
002D74 0000000000000000              5043 ERRSAVE  DC    4F'0'                                         04892001
                                     5044 *                                                            04893001
002D84 D7D9D6C7D9C1D440              5045 ESDNAME  DC    CL8'PROGRAM'                                  04894001
002D8C 1C                            5046 KP1      DC    PL1'1'                 CARD COUNT INCREMENT       04895001
                                     5047 *                                                            04896001
002D8D E2D6E4D9C3C540D7              5048 HEAD1    DC    C'SOURCE PROGRAM'                             04897001
002D9B E2C34040404040E2              5049 HEAD2    DC    C'SC      SOURCE STATEMENT'                   04898001
                                     5050 *                                                            04899001
002DB2 F0                            5051 OPINCHAR DC    C'0'                                          04900001
002DB3 00
002DB4 00000000                      5052 BRACKET  DC    F'0'                   BRACKET COUNTER            04901001
002DB8 00000040404040                5053 ESDCON   DC    X'00000040404040'      ESD CONSTANT 7 BYTES       04902001
002DBF 402020202020                  5054 SCPATTN  DC    XL6'402020202020'      SEMICOLON EDIT PATTERN     04903001
                                     5055 *                                                            04904001
002DC5 000000
002DC8 0000000000000000              5056 SAVE1    DC    7F'0'                                         04905001
002DE4 4040404040404040              5057 SAVEPRNT DC    CL88' '                                       04906001
002E3C 0000FFFF                      5058 SCOVFL   DC    F'65535'               (2**16)-1                  04907001
                                     5059 *                                                            04908001
002E40                               5060          LTORG                                               04909001
                                     5061 *                                                            04910001
000000                  00000 00D91  5062 WORKAREA DSECT                                               04911001
                                     5063 *                                                            04912001
                                     5064          COPY  WORKAREA               COMMON WORKAREA            04913001
                                     5065=*                                                            00001001
                                     5066=*        WORKAREA - MAPPING CSECT IEX00001                   00002001
                                     5067=*                                                            00003001
                                     5068=*        ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT  00004001
                                     5069=*                                                            00005001
000000 0000000000000000              5070=SAVEAREA DC    18F'0'                                        00006001
                                     5071=*                                                            00007001
                                     5072=*        DCB ADDRS                                           00008001
                                     5073=*                                                            00009001
000048                               5074=DCBTABLE DC    0F'0'                                         00010001
000048 00000000                      5075=ALINDCB  DC    A(0)                                          00011001
00004C 00000000                      5076=         DC    A(0)                                          00012001
000050 00000000                      5077=         DC    A(0)                                          00013001
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.12

000054 00000000                    5078=         DC    A(0)                                                           00014001
000058 00000000                    5079=ASYSDCB  DC    A(0)                                                           00015001
00005C 00000000                    5080=APRTDCB  DC    A(0)                                                           00016001
000060 00000000                    5081=APCHDCB  DC    A(0)                                                           00017001
000064 00000000                    5082=AUT1DCB  DC    A(0)                                                           00018001
000068 00000000                    5083=AUT2DCB  DC    A(0)                                                           00019001
00006C 00000000                    5084=AUT3DCB  DC    A(0)                                                           00020001
                                   5085=*                                                                             00021001
                                   5086=*        END OF DATA EXIT ADDRS                                               00022001
                                   5087=*                                                                             00023001
000070 00000000                    5088=EODUT1   DC    A(0)                    SYSUT1                                 00024001
000074 00000000                    5089=EODUT2   DC    A(0)                    SYSUT2                                 00025001
000078 00000000                    5090=EODUT3   DC    A(0)                    SYSUT3                                 00026001
00007C 00000000                    5091=EODIN    DC    A(0)                    SYSIN                                  00027001
                                   5092=*                                                                             00028001
                                   5093=*        OPTION SWITCHES IN COMPFLGS                                          00029001
                                   5094=*                                                                             00030001
                                   5095=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -                        00031001
                                   5096=*                                                                             00032001
                                   5097=*        PURPOSE                   POSITION                                   00033001
                                   5098=*                                  BYTE 1    BYTE 2    BYTE 3                 00034001
                                   5099=*                                  01234567  01234567  01234567               00035001
                                   5100=*                                                                             00036001
                                   5101=*        COMPMODE (SYNTAX CHECK)   X                                          00037001
                                   5102=*        SUBSCRIPT OPTIMIZATION     X                                         00038001
                                   5103=*        WARNING ERROR               X                                        00039001
                                   5104=*        SERIOUS ERROR                X                                       00040001
                                   5105=*        TERMINATING ERROR             X                                      00041001
                                   5106=*        PROCEDURE/PROGRAM              X                                     00042001
                                   5107=*        LONG/SHORT PRECISION            X                                    00043001
                                   5108=*        OPERAND                          X                                   00044001
                                   5109=*                                                                             00045001
                                   5110=*        NOSOURCE/SOURCE                            X                         00046001
                                   5111=*        NOLOAD/LOAD                                 X                        00047001
                                   5112=*        NODECK/DECK                                  X                       00048001
                                   5113=*        ISO/EBCDIC                                    X                      00049001
                                   5114=*        PROGRAM INTERRUPT                              X                     00050001
                                   5115=*        TERMINATING PHASE ENTERED                       X                    00051001
                                   5116=*        NO BUFFERS ASSIGNED                              X                   00052001
                                   5117=*        NO COMPILATION POSSIBLE                           X                  00053001
                                   5118=*                                                                             00054001
                                   5119=*        SYSPRINT DOWN                                               X        00055001
                                   5120=*        WHOLE SOURCE PROG IN CORE                                    X       00056001
                                   5121=*        NO OPTAB                                                      X      00057001
                                   5122=*        SYSPRINT NOT OPENED                                            X     00058001
                                   5123=*        ERROR UNRELATED TO SEMICOLON NR                                 X    00059001
                                   5124=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)                   X   00060001
                                   5125=*        60 CHARACTER SET                                                  X  00061001
                                   5126=*        (RESERVED)                                                         X 00062001
                                   5127=*                                                                             00063001
000080 00220000                    5128=COMPFLGS DC    X'00220000'             PARAMETERS AND SWITCHES                00064001
                                   5129=*                                                                             00065001
                                   5130=*        OPTION SWITCHES IN COMPFLGS                                          00066001
                                   5131=*                                                                             00067001
                      00080        5132=COMPMODE EQU   X'80'                   SYNTAX CHECK MODE                      00068001
                      00040        5133=SUBSCOPT EQU   X'40'                   SUBSCRIPT OPTIMIZATION                 00069001
                      000FB        5134=PGR      EQU   X'FB'                                                          00070001
                      00004        5135=PROC     EQU   X'04'                   PRECOMPILED PROCEDURE                  00071001
                                   5136=*                                                                             00072001
                      000FD        5137=SHRT     EQU   X'FD'                                                          00073001
                      00002        5138=LNG      EQU   X'02'                                                          00074001
                      00001        5139=OPERAND  EQU   X'01'                                                          00075001
                                   5140=*                                                                             00076001
                                   5141=*        ERROR SEVERITY INDICATORS IN COMPFLGS                                00077001
                                   5142=*                                                                             00078001
                      00020        5143=WERR     EQU   X'20'                   WARNING ERROR                          00079001
                      00010        5144=SERR     EQU   X'10'                   SERIOUS ERROR                          00080001
                      00008        5145=TERR     EQU   X'08'                   TERMINATING ERROR                      00081001
                                   5146=*                                                                             00082001
                                   5147=*        OPTION SWITCHES IN COMPFLGS+1                                        00083001
                                   5148=*                                                                             00084001
                      0007F        5149=SRCE     EQU   X'7F'                                                          00085001
                      00080        5150=NSRCE    EQU   X'80'                                                          00086001
                                   5151=*                                                                             00087001
                      000BF        5152=LOAD     EQU   X'BF'                                                          00088001
                      00040        5153=NLOAD    EQU   X'40'                                                          00089001
                                   5154=*                                                                             00090001
                      000DF        5155=DECK     EQU   X'DF'                                                          00091001
                      00020        5156=NDECK    EQU   X'20'                                                          00092001
                                   5157=*                                                                             00093001
                      000EF        5158=EBCDIC   EQU   X'EF'                                                          00094001
                      00010        5159=ISO      EQU   X'10'                                                          00095001
                                   5160=*                                                                             00096001
                                   5161=*        TERMINATION SWITCHES IN COMPFLGS+1                                   00097001
                                   5162=*                                                                             00098001
                      00008        5163=ERR      EQU   X'08'                   PROGRAM INTERRUPT HAS                  00099001
                                   5164=*                                      OCCURED IN COMPILER                    00100001
                      00004        5165=TERM     EQU   X'04'                   LAST PHASE HAS BEEN ENTERED            00101001
                      00002        5166=NOBUF    EQU   X'02'                   ERROR POOL IS IN WORKAREA              00102001
                                   5167=*                                      NO SCE PROG BUFF 1                     00103001
                      00001        5168=NOGO     EQU   X'01'                   COMPILATION NOT POSSIBLE               00104001
                                   5169=*                                      DO NOT START SCAN 1                    00105001
                      00003        5170=NOBUNOGO EQU   X'03'                   NOBUF AND NOGO                         00106001
                                   5171=*                                                                             00107001
                                   5172=*        SWITCHES IN COMPFLGS+2                                               00108001
                                   5173=*                                                                             00109001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.12

                        00080        5174=PRT       EQU    X'80'                SYSPRINT NOT AVAILABLE          00110001
                        00040        5175=SPIC      EQU    X'40'                SOURCE PROGRAM IN STORAGE       00111001
                        00020        5176=NOPT      EQU    X'20'                NO SUBSCRIPT OPTIMIZATION       00112001
                        00010        5177=PRTNO     EQU    X'10'                SYSPRINT NOT OPENED             00113001
                        00008        5178=NOSC      EQU    X'08'                SEMICOLON COUNTER NOT VALID     00114001
                                     5179=*                                                                     00115001
                        00004        5180=NOTEST    EQU    X'04'                                                00116001
                        000FB        5181=TEST      EQU    X'FB'                EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                     5182=*                                                                     00118001
                        00002        5183=SET60     EQU    X'02'                60 CHARACTER SET IS TO BE USED  00119001
                                     5184=*                                                                     00120001
                                     5185=*         MISCELLANEOUS CONTROL INFORMATION                           00121001
                                     5186=*                                                                     00122001
000084 0000B000                      5187=SIZE      DC     F'45056'         AVAILABLE MAIN STORAGE - NOT USED   00123001
000088 00000000                      5188=PICAADD   DC     A(0)             ADDR OF PICA OF THE INVOKER         00124001
00008C 00000000                      5189=HDING     DC     F'0'             ADDR OF HEADING INFO OF THE INVOKER 00125001
000090 00000000                      5190=ERET      DC     F'0'             RETURN ADDR FOR PROGRAM             00126001
                                     5191=*                                 AND I/O ERRORS                      00127001
000094 0000000C                      5192=PAGECNT   DC     PL4'0'           PAGE COUNT                          00128001
000098 0000                          5193=LINCNT    DC     H'0'             COUNTER OF LINES PER PAGE           00129001
00009A 0038                          5194=MAXLINES  DC     H'56'            MAX NUMBER OF PRINT LINES PER PAGE  00130001
00009C 0000                          5195=SEMCNT    DC     H'0'             SEMICOLON COUNTER                   00131001
00009E 0032                          5196=PBN       DC     H'50'            HIGHEST PROGRAM BLOCK NUMBER        00132001
0000A0 0000                          5197=KBN       DC     H'0'             HIGHEST CONSTANT POOL NUMBER        00133001
                        0001C        5198=LATNR     EQU    28               NR OF LIBRARY STAND FUNCTIONS       00134001
                        0006C        5199=LATBEG    EQU    4*(LATNR-1)                                          00135001
0000A2 006C                          5200=LN        DC     AL2(LATBEG)      LAST USED DISPLACEMENT IN LAT       00136001
0000A4 00000000                      5201=PRPT      DC     F'0'             PROGRAM POINTER                     00137001
0000A8 00000000                      5202=SAVOUTA   DC     F'0'                                                 00138001
0000AC                               5203=OUTAREA2  DS     F                SYSPUNCH SAVE AREA                  00139001
0000B0 40404040                      5204=PIDENT    DC     CL4' '           PROGRAM IDENTIFICATION              00140001
0000B4 0000000C                      5205=CARDCNT   DC     PL4'0'           OBJECT PROGRAM DECK SEQUENCE NUMBER 00141001
0000B8 00000000                      5206=PRTRTADD  DC     A(0)             ADDR OF PRINT ROUTINE               00142001
                                     5207=*                                                                     00143001
                                     5208=*         ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE   00144001
                                     5209=*                                                                     00145001
0000BC 00000278                      5210=ERRPOOL   DC     A(PRELPOOL)      FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                      5211=NEXTERR   DC     A(PRELPOOL)      NEXT FREE PLACE IN ERROR POOL       00147001
0000C4                               5212=ENDPOOL   DS     F                LAST BYTE OF ERROR POOL-23          00148001
0000C8                               5213=SRCE1ADD  DS     F                SOURCE PROGRAM BUFFER 1             00149001
0000CC                               5214=SRCE1END  DS     F                ADDR OF LAST BYTE+1                 00150001
0000D0                               5215=SULTSTRT  DS     F                ID OF LAST ITAB RECORD              00151001
                                     5216=*                                                                     00152001
                                     5217=*                                                                     00153001
                                     5218=*         TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                 00154001
                                     5219=*                                                                     00155001
0000D4                               5220=INBLKS    DS     H                MAX BLKSIZE FOR SYSIN    - NOT USED 00156001
0000D6                               5221=PRTBLKS   DS     H                MAX BLKSIZE SYSPRINT     - NOT USED 00157001
0000D8                               5222=LINBLKS   DS     H                MAX BLKSIZE FOR SYSLIN   - NOT USED 00158001
0000DA                               5223=PCHBLKS   DS     H                MAX BLKSIZE FOR SYSPUNCH - NOT USED 00159001
0000DC                               5224=POOLS     DS     F                SIZE OF ERROR POOL                  00160001
0000E0                               5225=SRCE1S    DS     F                SIZE OF SOURCE PROG BUFFERS 1 AND 2 00161001
                        000E0        5226=SRCE3S    EQU    SRCE1S           SIZE OF SOURCE PROG BUFFERS 3 AND 4 00162001
0000E4                               5227=ITAB10S   DS     F                SIZE OF ITAB FOR PHASE 10           00163001
0000E8                               5228=ITAB20S   DS     F                SIZE OF ITAB FOR PHASE 20           00164001
0000EC                               5229=ITAB30S   DS     F                SIZE OF ITAB FOR PHASE 30           00165001
0000F0                               5230=CRIDTABS  DS     F                SIZE OF CRIDTAB FOR PHASE 30        00166001
0000F4                               5231=SUTAB30S  DS     F                SIZE OF SUTAB BUFFER OF PHASE 30    00167001
0000F8                               5232=LVTAB30S  DS     F                SIZE OF LVTAB BUFFER FOR PHASE 30   00168001
0000FC                               5233=OPTABS    DS     F                SIZE OF OPTAB BUFFERS 1 AND 2       00169001
000100                               5234=SUTAB40S  DS     F                SIZE OF SUTAB IN PHASE 40           00170001
000104                               5235=LVTAB40S  DS     F                SIZE OF LVTAB IN PHASE 40           00171001
000108                               5236=OOSTACKS  DS     F                SIZE OF OPERATOR/OPERAND STACK      00172001
                                     5237=*                                                                     00173001
                                     5238=*         AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF        00174001
                                     5239=*         EACH NEW PAGE                                               00175001
                                     5240=*                                                                     00176001
                        0010C        5241=PAGEHEAD  EQU    *                                                    00177001
00010C 4040404040404040              5242=PAGEHD1   DC     CL121' '              FIRST HEADLINE                 00178001
000185                  00185 0010C  5243=          ORG    PAGEHD1                                              00179001
00010C F1                            5244=PAGEHD1C  DC     C'1'                  ASA CNTL                       00180001
00010D 4040404040404040              5245=          DC     CL10' '               SPACER                         00181001
000117 4040404040404040              5246=PAGEHD1D  DC     CL100' '              PAGE TEXT HEADING              00182001
00017B                  0017B 0017D  5247=          ORG    PAGEHD1+113                                          00183001
00017D D7C1C7C5                      5248=PAGEHD1P  DC     CL4'PAGE'             PAGE                           00184001
000181 40404040                      5249=PAGENUMB  DC     CL4' '                PAGE COUNTER                   00185001
000185                  00185 00185  5250=          ORG                                                         00186001
                                     5251=*                                                                     00187001
000185 4040404040404040              5252=PAGEHD2   DC     CL121' '              SECOND HEADLINE                00188001
0001FE                  001FE 00185  5253=          ORG    PAGEHD2                                              00189001
000185 40                            5254=PAGEHD2C  DC     C' '                  ASA CNTL                       00190001
000186 4040404040404040              5255=          DC     CL10' '               SPACER                         00191001
000190 4040404040404040              5256=PAGEHD2D  DC     CL100' '              PAGE TEXT HEADING              00192001
0001F4                  001F4 001FE  5257=          ORG                                                         00193001
                                     5258=*                                                                     00194001
0001FE 4040404040404040              5259=PAGEHD3   DC     CL121' '              THIRD HEADLINE                 00195001
000277                  00277 001FE  5260=          ORG    PAGEHD3                                              00196001
0001FE 40                            5261=PAGEHD3C  DC     C' '                  ASA CNTL                       00197001
0001FF 4040404040404040              5262=          DC     CL10' '               SPACER                         00198001
000209 4040404040404040              5263=PAGEHD3D  DC     CL100' '              PAGE TEXT HEADING              00199001
00026D                  0026D 00277  5264=          ORG                                                         00200001
                                     5265=*                                                                     00201001
                                     5266=*                                                                     00202001
                                     5267=*         END OF STANDARD COMMON AREA                                 00203001
                                     5268=*                                                                     00204001
                        00277        5269=STANDX    EQU    *                                                    00205001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.12

                                     5270=*                                                                        00206001
                                     5271=*       THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL               00207001
                                     5272=*       PHASES AND PARTLY OVERLAY EACH OTHER                             00208001
                                     5273=*                                                                        00209001
                                     5274=*                           NAME OR PURPOSE         NEEDED BY PHASES 00210001
                                     5275=*                                                                        00211001
000277 00
000278                               5276=         DC    0F'0'                                                     00212001
000278 4040404040404040              5277=PRELPOOL DC    236C' ',20C'X' PRELIMINARY ERROR POOL     IEX10          00213001
000378              00378 00416      5278=         ORG   PRELPOOL+414                                              00214001
                                     5279=*                           DCB FOR SYSIN               11               00215001
                                     5280=SYSIN    DCB   DDNAME=SYSIN,                                            X00216001
                                         =               DSORG=PS,                                                X00217001
                                         =               MACRF=(GM),                                              X00218001
                                         =               RECFM=FB,                                                X00219001
                                         =               LRECL=80,                                                X00220001
                                         =               BFTEK=S                                                   00221001


                                     5282+*                     DATA CONTROL BLOCK                                 01-DCB
                                     5283+*                                                                        01-DCB
000416 0000
000418                               5284+SYSIN    DC    0F'0'                  ORIGIN ON WORD BOUNDARY            01-DCB

                                     5286+*                     DIRECT ACCESS DEVICE INTERFACE                     01-DCB

000418 0000000000000000              5288+         DC    BL16'0'                 FDAD,DVTBL                        01-DCB
000428 00000000                      5289+         DC    A(0)                    KEYLE,DEVT,TRBAL                  01-DCB

                                     5291+*                     COMMON ACCESS METHOD INTERFACE                     01-DCB

00042C 00                            5293+         DC    AL1(0)                 BUFNO                              01-DCB
00042D 000001                        5294+         DC    AL3(1)                 BUFCB                              01-DCB
000430 0000                          5295+         DC    AL2(0)            BUFL                                    01-DCB
000432 4000                          5296+         DC    BL2'0100000000000000'            DSORG                    01-DCB
000434 00000001                      5297+         DC    A(1)                    IOBAD                             01-DCB

                                     5299+*                     FOUNDATION EXTENSION                               01-DCB

000438 40                            5301+         DC    BL1'01000000'                 BFTEK,BFLN,HIARCHY          01-DCB
000439 000001                        5302+         DC    AL3(1)                 EODAD                              01-DCB
00043C 90                            5303+         DC    BL1'10010000'          RECFM                              01-DCB
00043D 000000                        5304+         DC    AL3(0)                 EXLST                              01-DCB

                                     5306+*                     FOUNDATION BLOCK                                   01-DCB

000440 E2E8E2C9D5404040              5308+         DC    CL8'SYSIN'             DDNAME                             01-DCB
000448 02                            5309+         DC    BL1'00000010'          OFLGS                              01-DCB
000449 00                            5310+         DC    BL1'00000000'                         IFLG                01-DCB
00044A 5000                          5311+         DC    BL2'0101000000000000'   MACR                              01-DCB

                                     5313+*                     BSAM-BPAM-QSAM INTERFACE                           01-DCB

00044C 00                            5315+         DC    BL1'00000000'                                        RER1 01-DCB
00044D 000001                        5316+         DC    AL3(1)                 CHECK, GERR, PERR                  01-DCB
000450 00000001                      5317+         DC    A(1)                   SYNAD                              01-DCB
000454 0000                          5318+         DC    H'0'                   CIND1, CIND2                       01-DCB
000456 0000                          5319+         DC    AL2(0)                 BLKSIZE                            01-DCB
000458 00000000                      5320+         DC    F'0'                   WCPO, WCPL, OFFSR, OFFSW           01-DCB
00045C 00000001                      5321+         DC    A(1)                   IOBA                               01-DCB
000460 00                            5322+         DC    AL1(0)                 NCP                                01-DCB
000461 000001                        5323+         DC    AL3(1)                 EOBR, EOBAD                        01-DCB

                                     5325+*                          QSAM INTERFACE                                01-DCB

000464 00000001                      5327+         DC    A(1)                    RECAD                             01-DCB
000468 0000                          5328+         DC    H'0'                   QSWS                               01-DCB
00046A 0050                          5329+         DC    AL2(80)         LRECL                                     01-DCB
00046C 00                            5330+         DC    BL1'00000000'          EROPT                              01-DCB
00046D 000001                        5331+         DC    AL3(1)                 CNTRL                              01-DCB
000470 00000000                      5332+         DC    F'0'                   PRECL                              01-DCB
000474 00000001                      5333+         DC    A(1)                   EOB                                01-DCB
                                     5334=*              SYNAD=SYNAD    (ASSEMBLED IN IEX00001)                    00222001
                                     5335=*              EODAD=EODADIN  (INSERTED BY IEX11)                        00223001
000478              00478 00278      5336=         ORG   PRELPOOL                                                  00224001
000278                               5337=PBTAB2   DS    CL510          PROGR. BLOCK TABLE 2          20-50        00225001
000478                               5338=         DS    0F                                                        00226001
000478                               5339=PBTAB1   DS    CL255          PROGR. BLOCK TABLE 1          11-20        00227001
000577              00577 00478      5340=         ORG   PBTAB1                                                    00228001
000478                               5341=FSTAB    DS    CL255          FOR STATEMENT TABLE           30-40        00229001
                                     5342=*                           DCB FOR SYSUT1              11-30            00230001
                                     5343=SYSUT1   DCB   DDNAME=SYSUT1,                                           X00231001
                                         =               DSORG=PS,                                                X00232001
                                         =               MACRF=(R,W),                                             X00233001
                                         =               RECFM=F                                                   00234001


                                     5345+*                     DATA CONTROL BLOCK                                 01-DCB
                                     5346+*                                                                        01-DCB
000577 00
000578                               5347+SYSUT1   DC    0F'0'                  ORIGIN ON WORD BOUNDARY            01-DCB

                                     5349+*                     DIRECT ACCESS DEVICE INTERFACE                     01-DCB

000578 0000000000000000              5351+         DC    BL16'0'                 FDAD,DVTBL                        01-DCB
000588 00000000                      5352+         DC    A(0)                    KEYLE,DEVT,TRBAL                  01-DCB
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.12

                                     5354+*                     COMMON ACCESS METHOD INTERFACE                 01-DCB

00058C 00                            5356+        DC    AL1(0)                 BUFNO                           01-DCB
00058D 000001                        5357+        DC    AL3(1)                 BUFCB                           01-DCB
000590 0000                          5358+        DC    AL2(0)            BUFL                                 01-DCB
000592 4000                          5359+        DC    BL2'0100000000000000'              DSORG               01-DCB
000594 00000001                      5360+        DC    A(1)                    IOBAD                          01-DCB

                                     5362+*                     FOUNDATION EXTENSION                           01-DCB

000598 00                            5364+        DC    BL1'00000000'                 BFTEK,BFLN,HIARCHY       01-DCB
000599 000001                        5365+        DC    AL3(1)                 EODAD                           01-DCB
00059C 80                            5366+        DC    BL1'10000000'          RECFM                           01-DCB
00059D 000000                        5367+        DC    AL3(0)                 EXLST                           01-DCB

                                     5369+*                     FOUNDATION BLOCK                               01-DCB

0005A0 E2E8E2E4E3F14040              5371+        DC    CL8'SYSUT1'            DDNAME                          01-DCB
0005A8 02                            5372+        DC    BL1'00000010'          OFLGS                           01-DCB
0005A9 00                            5373+        DC    BL1'00000000'                         IFLG             01-DCB
0005AA 2020                          5374+        DC    BL2'0010000000100000'  MACR                            01-DCB

                                     5376+*                     BSAM-BPAM-QSAM INTERFACE                       01-DCB

0005AC 00                            5378+        DC    BL1'00000000'                                     RER1 01-DCB
0005AD 000001                        5379+        DC    AL3(1)                 CHECK, GERR, PERR               01-DCB
0005B0 00000001                      5380+        DC    A(1)                   SYNAD                           01-DCB
0005B4 0000                          5381+        DC    H'0'                   CIND1, CIND2                    01-DCB
0005B6 0000                          5382+        DC    AL2(0)                 BLKSIZE                         01-DCB
0005B8 00000000                      5383+        DC    F'0'                   WCPO, WCPL, OFFSR, OFFSW        01-DCB
0005BC 00000001                      5384+        DC    A(1)                   IOBA                            01-DCB
0005C0 00                            5385+        DC    AL1(0)                 NCP                             01-DCB
0005C1 000001                        5386+        DC    AL3(1)                 EOBR, EOBAD                     01-DCB

                                     5388+*                       BSAM-BPAM INTERFACE                          01-DCB

0005C4 00000001                      5390+        DC    A(1)                   EOBW                            01-DCB
0005C8 0000                          5391+        DC    H'0'                   DIRCT                           01-DCB
0005CA 0000                          5392+        DC    AL2(0)        LRECL                                    01-DCB
0005CC 00000001                      5393+        DC    A(1)                   CNTRL, NOTE, POINT              01-DCB
                                     5394=*             SYNAD=SYNAD,  (ASSEMBLED IN IEX00001)                  00235001
                                     5395=*             EODAD=EODAD1                                           00236001
                                     5396=*                                                                    00237001
0005D0                               5397=        DS    0F                                                     00238001
0005D0                               5398=SPTAB   DS    CL255         SCOPE TABLE                 11-30        00239001
0006D0                               5399=        DS    0F                                                     00240001
                        006CD        5400=GPTAB   EQU   *-3           GROUP TABLE                 11-30        00241001
0006D0                               5401=        DS    CL1510                                                 00242001
                                     5402=*                                                                    00243001
                                     5403=*       END OF SYMLIB PART OF COMMON WORK AREA                       00244001
                                     5404=*                                                                    00245001
                                     5405 *                                                                    04914001
000CB6                               5406 C       DS    H                PARENTHESIS COUNT                     04915001
000CB8                               5407 KB      DS    H                HOLDS ID FIELD FOR SPECIFICATIONS     04916001
000CBC                               5408 POOLLEN DS    F                LENGTH OF AREA GOTTEN FROM GETMAIN    04917001
000CC0                               5409 POOLLOC DS    F                START LOC OF AREA FROM GETMAIN        04918001
000CC4                               5410 AITABBUF DS   F                ADDR OF ITAB BUFFER                   04919001
000CC8                               5411 ELI     DS    F                ADDR OF ONE LOC  BEYOND ITAB AREA     04920001
000CCC                               5412 ADDARI  DS    A                ADDR OF FIRST O/P BUFFER              04921001
000CD0                               5413         DS    A                ADDR OF SECOND O/P BUFFER             04922001
000CD4                               5414 DISP    DS    C                DISPLACEMENT TO ADDARI                04923001
000CD5                               5415 D       DS    C                DIMENSION COUNTER                     04924001
000CD8                               5416 SP      DS    F                CURRENT STACK POINTER                 04925001
000CDC                               5417 APE     DS    F                LAST AVAILABLE BYTE IN CURRENT O/P    04926001
000CE0                               5418 WASAVE  DS    CL12                                                   04927001
000CEC                               5419 WABEFOR DS    CL7                                                    04928001
000CF3                               5420 WA      DS    CL80             READIN AREA FOR SYSIN SOURCE RECORDS  04929001
000D44                               5421 APRNTAR DS    A                ADDR OF CURRENT PRINT BUFFER          04930001
000D48                               5422 ATOPSTAK DS   A                LAST BYTE IN THE STACK                04931001
000D4C                               5423 IGC     DS    H                ITAB GROUP COUNTER                    04932001
000D50                               5424 AGT     DS    A                ADDR OF GROUPE TAB -3                 04933001
000D54                               5425 AKOPOOL DS    A                ADDR OF THE CONSTANT POOL (0)         04934001
000D58                               5426 LAPIN   DS    A                ADDR OF LAST POSSIBLE LABEL START     04935001
000D5C                               5427 DIM     DS    A                ADDR FOR DIMENSION IN ITAB NAME       04936001
000D60                               5428 PRIMPAR DS    A                ADDR OF FIRST SPECIFICATION           04937001
000D64                               5429 AITAB   DS    A                START ADDR OF ITAB                    04938001
000D68                               5430 AITL    DS    A                CURRENT ITAB ENTRY ADDR               04939001
000D6C                               5431 LIGP    DS    A                POINTER TO CURRENT IG HEAD ENTRY      04940001
000D70                               5432 LPBP    DS    A                POINTER TO CURRENT PBHEADING          04941001
000D74                               5433 WADDARI DS    A                CURRENT O/P BUFFER ADD                04942001
000D78                               5434 ITABLEN DS    F                ITAB LENGTH                           04943001
000D7C                               5435 MGESITL DS    F                ACCUMULATED ITAB LENGTH               04944001
000D80                               5436 BCHAR   DS    C                SAVE CHAR                             04945001
000D81                               5437 FBYTE   DS    CL1              SWITCH BYTE FOR APOSTROPHE            04946001
000D82                               5438 FSN     DS    C                FOR STATEMENT COUNTER                 04947001
000D83                               5439 ZFSNMAX DS    C                                                      04948001
000D84                               5440 PBC     DS    C                PROGRAM BLOCK COUNTER                 04949001
000D85                               5441 ONC     DS    C                O/P REC COUNTER                       04950001
000D86                               5442 N       DS    C                NUMBER OF ARRAYS WITH SAME DIM        04951001
000D88                               5443 OPIN    DS    A                POINTS TO LAST LABEL OPERATER         04952001
000D8C                               5444         DS    C                O/P REC NO WHEN OPIN WAS SET          04953001
000D8D                               5445 PZ      DS    C                COUNTS NUMBER OF PARMETERS            04954001
000D8E                               5446 BITS1   DS    C                INTERNAL SWITCHES                     04955001
                        00080        5447 BEGBIT  EQU   X'80'            BLOCK BEGIN                           04956001
                        0007F        5448 BEGOFF  EQU   X'7F'                                                  04957001
                        00040        5449 PROBIT  EQU   X'40'            PROCEDURE HEAD PROCESSING             04958001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.12

                        00020        5450 DELTABIT EQU    X'20'                SEMICOLON FOUND AFTER DECLARATION      04959001
                        00010        5451 IDBIT    EQU    X'10'                PROCEDURE NAME                         04960001
                        00008        5452 ARBIT    EQU    X'08'                ARRAY PROCESSED                        04961001
                        00004        5453 LISTBIT  EQU    X'04'                COMMA FOUND AFTER ARRAY NAME           04962001
                        00001        5454 TERBIT   EQU    X'01'                RETURN TO TERM AFTER PBLCKEND          04963001
000D8F                               5455 BITS2    DS     C                                                           04964001
                        00080        5456 ENDBIT   EQU    X'80'                LOGICAL END HAS BEEN FOUND             04965001
                        00040        5457 COBIT    EQU    X'40'                COMMENT                                04966001
                        00020        5458 STARTBIT EQU    X'20'                ZERO UNTIL FIRST BEGIN FOUND           04967001
                        00010        5459 VALBIT   EQU    X'10'                VALUE                                  04968001
                        00008        5460 PB0BIT   EQU    X'08'                WRITE PB0 FOR PRE COMP PROC            04969001
                        00002        5461 FRSTPUT  EQU    X'02'                FIRST PUT IN GENERATE                  04970001
                        00001        5462 ENDELSE  EQU    X'01'                END MAY CLOSE FOR OR PROC**            04971001
000D90                               5463 BITS3    DS     C                                                           04972001
                        00080        5464 E11BIT   EQU    X'80'                E11 HAS BEEN GENERATED ONCE            04973001
                        00040        5465 FMBIT    EQU    X'40'                FORMAL PARAMETER BIT                   04974001
                        000BF        5466 FMOFF    EQU    X'BF'                                                       04975001
                        00020        5467 NOFREE   EQU    X'20'                INTERUPT BEFORE GETMAIN                04976001
                        00010        5468 FRSITB   EQU    X'10'                FIRST ITAB REC IS WRITTEN              04977001
                        00008        5469 PROCESD  EQU    X'08'                WRITE SED CARD FOR PRE COMP PROC       04978001
                        000F7        5470 PROCOFF  EQU    X'F7'                                                       04979001
                                     5471 *                                                                           04980001
                                     5472 *             CHARACTER EQUATES                                             04981001
                                     5473 *                                                                           04982001
                                     5474               IEXCHAR                                                       04983001
                                     5475+*                                                                           01-IEXCH
                                     5476+*             CHARACTER A - Z                                               01-IEXCH
                                     5477+*                                                                           01-IEXCH
                        00040        5478+XFA      EQU    X'40'                                                       02-IEXCG
                        00041        5479+XFB      EQU    X'41'                                                       02-IEXCG
                        00042        5480+XFC      EQU    X'42'                                                       02-IEXCG
                        00043        5481+XFD      EQU    X'43'                                                       02-IEXCG
                        00044        5482+XFE      EQU    X'44'                                                       02-IEXCG
                        00045        5483+XFF      EQU    X'45'                                                       02-IEXCG
                        00046        5484+XFG      EQU    X'46'                                                       02-IEXCG
                        00047        5485+XFH      EQU    X'47'                                                       02-IEXCG
                        00048        5486+XFI      EQU    X'48'                                                       02-IEXCG
                        00049        5487+XFJ      EQU    X'49'                                                       02-IEXCG
                        0004A        5488+XFK      EQU    X'4A'                                                       02-IEXCG
                        0004B        5489+XFL      EQU    X'4B'                                                       02-IEXCG
                        0004C        5490+XFM      EQU    X'4C'                                                       02-IEXCG
                        0004D        5491+XFN      EQU    X'4D'                                                       02-IEXCG
                        0004E        5492+XFO      EQU    X'4E'                                                       02-IEXCG
                        0004F        5493+XFP      EQU    X'4F'                                                       02-IEXCG
                        00050        5494+XFQ      EQU    X'50'                                                       02-IEXCG
                        00051        5495+XFR      EQU    X'51'                                                       02-IEXCG
                        00052        5496+XFS      EQU    X'52'                                                       02-IEXCG
                        00053        5497+XFT      EQU    X'53'                                                       02-IEXCG
                        00054        5498+XFU      EQU    X'54'                                                       02-IEXCG
                        00055        5499+XFV      EQU    X'55'                                                       02-IEXCG
                        00056        5500+XFW      EQU    X'56'                                                       02-IEXCG
                        00057        5501+XFX      EQU    X'57'                                                       02-IEXCG
                        00058        5502+XFY      EQU    X'58'                                                       02-IEXCG
                        00059        5503+XFZ      EQU    X'59'                                                       02-IEXCG
                                     5504+*                                                                           01-IEXCH
                                     5505+*             NATIONAL CHARACTERS                                           01-IEXCH
                                     5506+*                                                                           01-IEXCH
                        0005A        5507+XFDOLLAR EQU    X'5A'                                                       02-IEXCG
                        0005B        5508+XFUNDER  EQU    X'5B'                                                       02-IEXCG
                        0005C        5509+XFHASH   EQU    X'5C'                                                       02-IEXCG
                        0005D        5510+XFAT     EQU    X'5D'                                                       02-IEXCG
                                     5511+*                                                                           01-IEXCH
                                     5512+*             NUMERIC 0 - 9                                                 01-IEXCH
                                     5513+*                                                                           01-IEXCH
                        00030        5514+XF0      EQU    X'30'                                                       02-IEXCG
                        00031        5515+XF1      EQU    X'31'                                                       02-IEXCG
                        00032        5516+XF2      EQU    X'32'                                                       02-IEXCG
                        00033        5517+XF3      EQU    X'33'                                                       02-IEXCG
                        00034        5518+XF4      EQU    X'34'                                                       02-IEXCG
                        00035        5519+XF5      EQU    X'35'                                                       02-IEXCG
                        00036        5520+XF6      EQU    X'36'                                                       02-IEXCG
                        00037        5521+XF7      EQU    X'37'                                                       02-IEXCG
                        00038        5522+XF8      EQU    X'38'                                                       02-IEXCG
                        00039        5523+XF9      EQU    X'39'                                                       02-IEXCG
                                     5524+*                                                                           01-IEXCH
                                     5525+*             SPECIAL CHARS                                                 01-IEXCH
                                     5526+*                                                                           01-IEXCH
                        00000        5527+XFPLUS   EQU    X'00'                                                       02-IEXCG
                        00001        5528+XFMINUS  EQU    X'01'                                                       02-IEXCG
                        00002        5529+XFASTER  EQU    X'02'                                                       02-IEXCG
                        00003        5530+XFSLASH  EQU    X'03'                                                       02-IEXCG
                        00006        5531+XFLBRAC  EQU    X'06'                                                       02-IEXCG
                        00007        5532+XFCOLON  EQU    X'07'                                                       02-IEXCG
                        00008        5533+XFLSQBR  EQU    X'08'                                                       02-IEXCG
                        0000B        5534+XFSCOLON EQU    X'0B'                                                       02-IEXCG
                        00010        5535+XFEQUAL  EQU    X'10'                                                       02-IEXCG
                        00011        5536+XFLT     EQU    X'11'                                                       02-IEXCG
                        00012        5537+XFGT     EQU    X'12'                                                       02-IEXCG
                        00020        5538+XFNOT    EQU    X'20'                                                       02-IEXCG
                        00022        5539+XFOR     EQU    X'22'                                                       02-IEXCG
                        00023        5540+XFAMPER  EQU    X'23'                                                       02-IEXCG
                        00025        5541+XFCOMMA  EQU    X'25'                                                       02-IEXCG
                        00026        5542+XFRBRAC  EQU    X'26'                                                       02-IEXCG
                        00028        5543+XFRSQBR  EQU    X'28'                                                       02-IEXCG
                        0002B        5544+XFBLANK  EQU    X'2B'                                                       02-IEXCG
                        0002D        5545+XFPERIOD EQU    X'2D'                                                       02-IEXCG
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.12

                        0002E        5546+XFQUOTE  EQU   X'2E'                                                     02-IEXCG
                                     5547+*                                                                        01-IEXCH
                        0000C        5548+XFDQUOTE EQU   X'0C'                                                     02-IEXCG
                                     5549+*                                                                        01-IEXCH
                        0002C        5550+XFEXCLM  EQU   X'2C'                                                     02-IEXCG
                        0002C        5551+XFPERCT  EQU   X'2C'                                                     02-IEXCG
                                     5552+*                                                                        01-IEXCH
                                     5553+*        INTERNAL CONTROL CODES                                          01-IEXCH
                                     5554+*                                                                        01-IEXCH
                        00005        5555+XFPOWER    EQU   X'05'                                                   01-IEXCH
                        00016        5556+XFASSIGN   EQU   X'16'                                                   01-IEXCH
                        00017        5557+XFGOTO     EQU   X'17'                                                   01-IEXCH
                        00018        5558+XFFOR      EQU   X'18'                                                   01-IEXCH
                        0001D        5559+XFIF       EQU   X'1D'                                                   01-IEXCH
                        00027        5560+XFLABEL    EQU   X'27'                                                   01-IEXCH
                        00029        5561+XFDELTA    EQU   X'29'                                                   01-IEXCH
                        0002C        5562+XFEND      EQU   X'2C'                                                   01-IEXCH
                        0002F        5563+XFZETA     EQU   X'2F'                                                   01-IEXCH
                        0003E        5564+XFDECPT    EQU   X'3E'                                                   01-IEXCH
                                     5565 *                                                                        04984001
                                     5566 *        REGISTER EQUATES                                                04985001
                                     5567 *                                                                        04986001
                                     5568          IEZREGS                                                         04987001
                        00000        5569+R0       EQU   0                                                         01-IEZRE
                        00001        5570+R1       EQU   1                                                         01-IEZRE
                        00002        5571+R2       EQU   2                                                         01-IEZRE
                        00003        5572+R3       EQU   3                                                         01-IEZRE
                        00004        5573+R4       EQU   4                                                         01-IEZRE
                        00005        5574+R5       EQU   5                                                         01-IEZRE
                        00006        5575+R6       EQU   6                                                         01-IEZRE
                        00007        5576+R7       EQU   7                                                         01-IEZRE
                        00008        5577+R8       EQU   8                                                         01-IEZRE
                        00009        5578+R9       EQU   9                                                         01-IEZRE
                        0000A        5579+R10      EQU   10                                                        01-IEZRE
                        0000B        5580+R11      EQU   11                                                        01-IEZRE
                        0000C        5581+R12      EQU   12                                                        01-IEZRE
                        0000D        5582+R13      EQU   13                                                        01-IEZRE
                        0000E        5583+R14      EQU   14                                                        01-IEZRE
                        0000F        5584+R15      EQU   15                                                        01-IEZRE
                                     5585 *                                                                        04988001
000000                               5586          END   IEX11000                                                  04989001
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Symbol    Length    Value     Id     Type Asm  Program    Defn  References                     X390 3.1.04  2012/08/17 13.12

ADDARI         4 00000CCC FFFFFFFF  A A               5412   255M  273M  274  1346
AGT            4 00000D50 FFFFFFFF  A A               5424   307M 1785  2269  3465
AITAB          4 00000D64 FFFFFFFF  A A               5429   257M 3842
AITABBUF       4 00000CC4 FFFFFFFF  F F               5410   253M  308  2050  2061
AITL           4 00000D68 FFFFFFFF  A A               5430   265M  664   702   727   952  1120  1219  1271  1280M 1810
                                                             1952  2010  2023M 2085  2274  2302  2327  2368  2400  2406
                                                             2589  2684  2711  2743  2809  2963  2981  3062  3119  3201
                                                             3374  3413  3456  3519  3589  3844  3846
AKOPOOL        4 00000D54 FFFFFFFF  A A               5425   247M 3242  3314  3329  3884
ALINDCB        4 00000048 FFFFFFFF  A A               5075  4051
ALLPUPOS       5 000007F4 00000001  X X               1127  1124
APCHDCB        4 00000060 FFFFFFFF  A A               5081  4048  4067
APE            4 00000CDC FFFFFFFF  F F               5417   271M  334   346  1302  1306  1351M
APOSTROF       4 00000300 00000001  I                  503   362B 4161
APRNTAR        4 00000D44 FFFFFFFF  A A               5421   276M 1375M 1385  3247
ARCOMMA        4 0000198E 00000001  I                 2809  2735B
ARNAMEAA       4 00001928 00000001  I                 2756  2752B
ARNAMESE       4 00001910 00000001  I                 2749  2723B
ARRAY          4 00001866 00000001  I                 2704  4890
ARRAYAA        4 00001882 00000001  I                 2711  2707B
ARRYDME1       4 0000188E 00000001  I                 2714  2687B
ARRYID         4 000018C6 00000001  I                 2727  2828B
ARRYLPAR       4 00001932 00000001  I                 2772  2731B 2733B
ARRYLSQB       4 0000197A 00000001  I                 2794  2778B 2781B
ARRYMULT       4 000019B0 00000001  I                 2824  2725B
ARRYNAME       4 000018AC 00000001  I                 2721  2750B 2753  2816B 3065B
ARRYSLAA       4 00001972 00000001  I                 2789  2785B
ARRYSLSH       4 00001952 00000001  I                 2780  2783B 2786
ARTABLE        1 000028D0 00000001  R A               4596  2844
ARYEXIT        4 000018FC 00000001  I                 2743  2760B
ARYEXITA       4 00001904 00000001  I                 2745  3095B
ASSIGN         4 000002CA 00000001  I                  467   613B 4163  4177
ASYSDCB        4 00000058 FFFFFFFF  A A               5079  1376  3909
ATABLE         1 000027B6 00000001  R A               4294   508
ATOPSTAK       4 00000D48 FFFFFFFF  A A               5422   310M 1703  2249  3422
AUT1DCB        4 00000064 FFFFFFFF  A A               5082  3936
AUT3DCB        4 0000006C FFFFFFFF  A A               5084  2062  3899
BCHAR          1 00000D80 FFFFFFFF  C C               5436  1078  1596M 1598  1602  1606
BEGIN          4 00000D3A 00000001  I                 1690  4889
BEGINAA        4 00000D7E 00000001  I                 1709  1704B
BEGINAB        4 00000D86 00000001  I                 1711  1725B 1727B
BEGOFF         1 0000007F           U                 5448  1773
BEGPROC        4 00000D8E 00000001  I                 1722  1692B
BEG1           2 00000DCC 00000001  I                 1772  2300B 2682B 2709B 3117B 3369B 3408B
BEG1FAAA       4 00000E1E 00000001  I                 1796  1791B
BEG1FRST       4 00000DDA 00000001  I                 1776  1749B
BITS1          1 00000D8E FFFFFFFF  C C               5446   294M  481M  486M  846   862M  873M  877M 1563  1701M 1723M
                                                             1773M 1832M 1857M 1871M 1913M 2100  2133M 2208  2247M 2258M
                                                             2295  2297  2359M 2410M 2432M 2457M 2487  2577M 2623  2636
                                                             2677  2679  2704  2706  2724  2745M 2772M 2815M 2827M 2913
                                                             2934  2950  2983M 2984M 3008  3084M 3085M 3112  3114  3138M
                                                             3360  3366  3403  3405  3471M 3488  3513M 3522  3541  3543M
                                                             3566  3574  3655M 3759M
BITS2          1 00000D8F FFFFFFFF  C C               5455   295M  327   523   591  1033  1487  1524  1539  1557  1665
                                                             1676M 1746M 1833  1835M 1903M 1906M 2035  2083  2106M 2132M
                                                             2136M 2139M 2175  2202  2204  2206  2411M 2597  2626M 2638M
                                                             3419M 3753  3847M 4062  4077M
BITS3          1 00000D90 FFFFFFFF  C C               5463   296M  845M 1075  1080M 2039  2111M 2408  2417  3420M 3514
                                                             3516M 3540M 3674M 3795M 3890  3958
BLANK          4 000001F8 00000001  I                  374  4158
BLKAPOS        2 00000348 00000001  I                  543  4166
BLKAPOSA       6 0000034A 00000001  I                  544   599B
BLOCKEND       4 00000F42 00000001  I                 1930  1843
BOLCON         4 00000CC6 00000001  I                 1638  4887
BOTH           4 000025FE 00000001  I                 4062  4047B
BPRTAB         4 000026C4 00000001  A A               4148   339   450   510  2855  3251
BRACKET        4 00002DB4 00000001  F F               5052   408   417M 3971
BTABLE         1 00002814 00000001  X X               4397   379   544  3805
BUCKET         1 0000037E 00000001  X X                561   558M  559   610M  959M  960   980
C              2 00000CB6 FFFFFFFF  H H               5406  2774M 2871  2873M 2883  2885M 2915  2926  3005  3007M 3010
                                                             3175M
CARDCNT        4 000000B4 FFFFFFFF  P P               5205  4084M 4085
CDE2           4 00001DA6 00000001  I                 3230  3319B
CIB            4 00000A28 00000001  I                 1368   283B  364B  399B  578B  621B 1227B 1254B 1264B 1619B 2180B
                                                             2317B 2334B 2538B 2552B 2754B 2787B 2860B 2902B 3049B 3072B
                                                             3159B 3169B 3186B 3286B 3295B 3565B 3704B 3719B 3729B 3807B
                                                             4162
CID            4 00001E4C 00000001  I                 3299  3293B
CIDAA          4 00001E64 00000001  I                 3306  3302B
CIDBB          4 00001E6C 00000001  I                 3308  3304B
CIDCC          4 00001E84 00000001  I                 3314  3312B
CID1           4 00001E74 00000001  I                 3310  3288B 3297B
CLCERR         4 00000BA8 00000001  I                 1522  1536B
CLCLOOP        4 00000B4C 00000001  I                 1484  1495B
CLSPERM        4 00002500 00000001  I                 3952  3938B
CLSYSUT3       4 0000247A 00000001  I                 3899  3891B
COB            4 0000098C 00000001  I                 1306   332B  401B  406B  426B  457B  467B  529B  733B 1216B 1230B
                                                             1627B 1653B 1667B 1891B 2718B 2740B 2794B 2824B 2867B 2891B
                                                             2904B 2920B 2936B 3001B 3051B 3059B 3135B 3171B 3198B 3524B
                                                             3571B 3620B 3629B 3651B 3734B 3783B 3849B
COBSPEB        4 00000992 00000001  I                 1308   351B 1304B 3854B
COBSPEC        4 00000982 00000001  I                 1302   844B  883B  891B 1639B 1694B 1968B 2089B 2227B 2450B 3219B
                                                             3372B 3411B
COBSPED        4 000009AC 00000001  I                 1317  1312B
CODE           4 000015EE 00000001  I                 2432  4888
CODEAA         4 000015FE 00000001  I                 2436  2434B
CODEBB         4 00001630 00000001  I                 2449  2447B
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Symbol    Length    Value     Id      Type Asm  Program     Defn  References                            X390 3.1.04  2012/08/17 13.12

CODERR         4 00001688 00000001  I                       2476  2438B 2442B
COLON          2 000003D2 00000001  I                        608  4155
COLONLST       4 00001AA4 00000001  I                       2934  4169
COLON2         4 000003DE 00000001  I                        611   617B
COM            4 00001338 00000001  I                       2139  4894
COMCED2        4 0000136C 00000001  I                       2157   590B 2137B 2143B 2147B 2149B 2152B 2176B
COMCEE2        2 00001370 00000001  I                       2158   520B 1512B 2134B 2186
COMERR         4 00001324 00000001  I                       2132  2480B 2494B 2645B 2747B 3204B 3743
COMMAG3        6 00001A96 00000001  I                       2926  2914B
COMMAH2        4 00001A78 00000001  I                       2917  2927B
COMMAJ2        4 00001A84 00000001  I                       2920  2916B 2928B
COMMALST       4 00001A66 00000001  I                       2913  4180
COMMEND        4 00001330 00000001  I                       2136  1858  1900B 1904B 2109B
COMPARE2       6 00001052 00000001  I                       2053  2058B
COMPDEND       4 00000EE0 00000001  I                       1891  1844
COMPENDI       4 00000EF6 00000001  I                       1897  1931B
COMPEND2       4 00000F0E 00000001  I                       1906  2203B
COMPEND3       4 00000F26 00000001  I                       1913  1909B 1918B
COMPEND4       4 00000F32 00000001  I                       1917  1910
COMPFIN        4 00000728 00000001  I                       1003   913B 2961B 3029B 3662B
COMPFLGS       4 00000080 FFFFFFFF  X X                     5128   832M 1003M 1371  1383  1386  1600  1737  3517  3840  3857M
                                                                  3874  3937  3968M 3969  3973M 4046  4049
COMPID         6 0000176E 00000001  I                       2586  2590B
COMPMODE       1 00000080           U                       5132  3973
COMSPEC        4 00000C24 00000001  I                       1577  1477B
COMSPECN       6 00000C3E 00000001  I                       1584  1579B
COMTABLE      96 00002B30 00000001  X X                     4905  2160  4906  4908  4910  4912
CONT           2 0000018A 00000001  I                        329  2845B
D              1 00000CD5 FFFFFFFF  C C                     5415  2776M 2917  2919M 2955  2965  2967M 2968  3022  3023  3032M
                                                                  3034  3177M
DECPOINT       4 000002BC 00000001  I                        457  4164  4178
DELCHECK       4 00002256 00000001  I                       3700  3699  3702B 3708B
DELCOLAA       2 000022CA 00000001  I                       3731  3727B
DELCOLON       4 000022A6 00000001  I                       3721  3706B 3713B 3725B 3728
DELIMIT        2 00000B0C 00000001  I                       1463  4171
DELIM01        4 00000B1E 00000001  I                       1472  1467B
DELIM02        4 00000B64 00000001  I                       1491  1488B
DELPAREN       4 000022D0 00000001  I                       3734  3723B
DELPOINT       4 00002282 00000001  I                       3711  3715B 3718
DELPRGTB       4 00002AE8 00000001  A A                     4880  1491  1532
DELTA          4 00000638 00000001  I                        862   847B
DEL1           4 00002084 00000001  I                       3522  3515B 3518B
DIM            4 00000D5C FFFFFFFF  A A                     5427  2717M 3033  3036M
DISP           1 00000CD4 FFFFFFFF  C C                     5414   287M 1344M 1345
DOUBLE         8 00002D60 00000001  D D                     5038  1389M 1391  3815M 3816
EBF4           4 00002060 00000001  I                       3514  3510B 3594B 3597B 3599B
ECA3           4 00002098 00000001  I                       3527  3523B
ECJ3           4 000020CC 00000001  I                       3539  3559B
EDA1           4 00002186 00000001  I                       3614  3489B
ELI            4 00000CC8 FFFFFFFF  F F                     5411   267M 1273  3550
EMPTYFAA       4 00000F8E 00000001  I                       1967  1964B
EMPTYFOR       4 00000F8A 00000001  I                       1966  1955B
END            4 00000E82 00000001  I                       1832  1587B 4884
ENDBIT         1 00000080           U                       5456  1665  1833  2106  2204
ENDCOUNT       2 00002D72 00000001  H H                     5042  3768  3770M 3814
ENDLIST        4 00001C06 00000001  I                       3084  2969B
ENDMISS        4 000022EE 00000001  I                       3753   243
ENDMISSA       4 000022FC 00000001  I                       3759  3754B
ENDPOOL        4 000000C4 FFFFFFFF  F F                     5212  1175
ENDSTRIN       4 00001E9A 00000001  I                       3327  3307B
ENTRAPR        2 00000304 00000001  I                        504  1036B 1048B 1582B 1585B 1588B 2178B 2325B 2560B
EODADIN        4 000023B2 00000001  I                       3840   245  1104B 2107
EODIN          4 0000007C FFFFFFFF  A A                     5091   244M 2108M
EQUAL          4 000003E2 00000001  I                        612   620
EQUALOK        4 00001D08 00000001  I                       3171  3153B 3163B
ERET           4 00000090 FFFFFFFF  F F                     5190   228M  246M
EROUT          4 00000B7C 00000001  I                       1510   528B  550B  573B 1473B 1496B 4173
EROUT2         4 00000B90 00000001  I                       1516  1538B
EROUT3         4 00000BCC 00000001  I                       1535  1523B
ERRKCAL        4 00000896 00000001  I                       1195  1194M
ERRKC01        4 000008A2 00000001  I                       1198  1196B
ERRMOD1        4 00000860 00000001  I                       1174  1170M
ERRMOD2        4 00000878 00000001  I                       1181  1171M
ERRMOD3        4 0000087C 00000001  I                       1182  1172M
ERRMOVE        6 000008AC 00000001  I                       1203   967X 1140X 1157X
ERROR1         6 0000084A 00000001  I                       1170   966B  979B  995B 1017B 1043B 1063B 1137B 1154B 3813B
ERROR10        4 000007CE 00000001  I                       1114   489B  880B 1726B 1874B 2261B 2435B
ERROR16        4 00002130 00000001  I                       3571  3511
ERROR16A       4 0000214C 00000001  I                       3579  3567B
ERROR2         4 0000088E 00000001  I                       1193   965B
ERROR2A        4 00000892 00000001  I                       1194  1197B
ERROR21        4 0000081E 00000001  I                       1150  1775B
ERROR3         4 0000070A 00000001  I                        977   659B  661B  753B  759B  762B  789B  793B 2935B
ERROR37        4 000022E0 00000001  I                       3739  3710B 3717B 3732B
ERROR39        4 00002392 00000001  I                       3812  3775
ERROR7         4 000004B4 00000001  I                        698   676B
ERROR7A        4 000004BA 00000001  I                        702   696B
ERRSAVE        4 00002D74 00000001  F F                     5043   964M  968   977M  981  1016M 1018  1042M 1047  1062M 1064
                                                                  1134M 1138  1141  1150M 1156  1159  2041M 2049  4045M 4059
ERR0           4 000006AC 00000001  I                        909  1177B
ERR1           4 000006C0 00000001  I                        924  4159
ERR13          4 000007FA 00000001  I                       1134  1526B
ERR2           4 000006CC 00000001  I                        952   698B 2396B 2736B 2789B 2957B 2977B 3025B 3090B 3194B 3585B
ERR2B          4 000006D4 00000001  I                        955  1114B 3658B 3739B
ERR2C          6 000006E0 00000001  I                        959  1541B
ERR2D          4 000006F2 00000001  I                        964   953B  957B  961B
ERR2E          4 000006EE 00000001  I                        963  2562B 2591B 2601B 2649B
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Symbol    Length    Value     Id     Type Asm  Program     Defn  References                        X390 3.1.04  2012/08/17 13.12

ERR4           4 00000724 00000001  I                      995    653B  780B 1275B 1313B 1705B 1792B 2019B 2236B 2251B 3424B
                                                                 3432B 3552B 3755B
ERR5           4 00000738 00000001  I                     1015  4165
ERR5A          4 00000730 00000001  I                     1012  4179
ERR5B          4 0000073C 00000001  I                     1016  1013B
ERR6           4 0000074E 00000001  I                     1033  1468B
ERR6A          2 0000076A 00000001  I                     1041  1037B
ERR7           4 0000078A 00000001  I                     1062   593B  692B  721B  836B  924B 1081B 1087B 1100B 1739B 2153B
                                                                 2390B 2464B 2476B 2490B 2641B 2657B 2756B 3128B 3188B 3336B
                                                                 3450B 3579B 3870B
ERR8           4 0000079A 00000001  I                     1075   854  1558B 1601B 1607B 1617B 1842
ERR9           4 000007C4 00000001  I                     1100  1666B 1834B 3808B
ESDCON         7 00002DB8 00000001  X X                   5053  4109
ESDNAME        8 00002D84 00000001  C C                   5045  3520M 3521M 3877
ESDPARM        8 00002444 00000001  C C                   3880  3877M
ESDT           1 00002678 00000001  X X                   4099  4013
EXCLC          6 00000B76 00000001  I                     1498  1484X 1522X
EXMVC          6 0000016E 00000001  I                      313   337X  349X
EXMVC1         4 0000106C 00000001  I                     2059  2052B
E11BIT         1 00000080           U                     5464  1075  1080
E18            4 000007BC 00000001  I                     1087  1079B
E18A           2 000007C2 00000001  I                     1091  1085B
E21PAR         2 00000848 00000001  X X                   1162  1152M 1153
E23            4 00001EB2 00000001  I                     3335  3227B 3240B 3313B 3340M
E23AA          4 00001EBC 00000001  I                     3340  3335B
E39PAR         2 00002390 00000001  X X                   3810  3812
FBYTE          1 00000D81 FFFFFFFF  C C                   5437   503M  519   588  1035  1476  1510  2177M 2324M 2559M
FINDCOMA       4 00000938 00000001  I                     1257  1250B
FINDCOMB       4 0000093C 00000001  I                     1258  1262B
FINDEMTY       4 000007D8 00000001  I                     1119  1123B 1125B
FINDSEMA       4 0000090E 00000001  I                     1245  1252B
FINDSEMC       4 00000912 00000001  I                     1246  2187B 2349B 2405B 2461B 2468  2576B 3075B 3512B 3593B 3598B
                                                                 3650B
FIRSTBEG       4 00000DA6 00000001  I                     1737  1599B
FIRSTB01       4 00000DBC 00000001  I                     1746  1738B
FIRSTPUT       4 00002628 00000001  I                     4077  4063B
FIRSTSTR       4 000001E0 00000001  I                      361   328B
FMBIT          1 00000040           U                     5465  2408  2417  3540
FMOFF          1 000000BF           U                     5466   845  3674
FOR            4 000013C4 00000001  I                     2226  4885
FORAA          4 000013F4 00000001  I                     2240  2235B
FORBB          4 00001426 00000001  I                     2255  2250B
FOREND         4 00000F4A 00000001  I                     1950   860   889B 1848  1911B 1919B 3781
FORENDAA       4 00000F6C 00000001  I                     1958  1956B
FREE           4 00002512 00000001  I                     3958  3948B
FRSITB         1 00000010           U                     5468  2039  2111  3890
FSN            1 00000D82 FFFFFFFF  C C                   5438   298M 2234  2240  2242M 3865
GENESD         4 0000256E 00000001  I                     4012  3878B
GENTLEN        2 00002462 00000001  H H                   3888  3885M
GENTXTS        4 00002580 00000001  I                     4017  3886B
GEN3           1 000025CE 00000001  U                     4044  4015B 4023B 4025B 4041B
GEN4           2 000025C6 00000001  I                     4040  4130B
GEN6           4 000025A4 00000001  I                     4026  4090B 4093B
GEN6A          2 000025B6 00000001  I                     4032  4030B
GETERRPH       2 00002556 00000001  H H                   3985  3959B 3970B
GETREC         4 00000A48 00000001  I                     1376  1372B
GIF            4 00000CE8 00000001  I                     1653  4883
GPTAB          1 000006CD FFFFFFFF  U                     5400   300M  306
HEAD1         14 00002D8D 00000001  C C                   5048   280
HEAD2         23 00002D9B 00000001  C C                   5049   281
IAPOST         4 00000AEE 00000001  I                     1424  1410B
IDBUCKET       1 0000173E 00000001  X X                   2569   963  2530M 2531  2586
IDCHECK        4 000016AE 00000001  I                     2527  1568  2548B 2551  2556  2566  2624B 2639B 2691B 3364B
IDCHECK1       4 000008B4 00000001  I                     1216  2727B 3142B 3484B
IDCHECK2       4 000008D8 00000001  I                     1224  1229B 1236B 2729B 3144B 3487B
IDCHECK3       4 000008DC 00000001  I                     1225  1223
IDCHKEND       4 000017A8 00000001  I                     2614  2600B
IDCOMMA        6 00001760 00000001  I                     2578  2574B
IDENDER        4 000017CE 00000001  I                     2623  2595B 2605B 2621B 2653B 2662B 2665B
IDLOOP         4 000016D6 00000001  I                     2536  2541B 2545B 2572B
IDLOOPAA       4 000016DA 00000001  I                     2537  2535
IDNOLETA       4 00001718 00000001  I                     2554  2550B
IDNOLETB       4 00001728 00000001  I                     2559  2555B
IDNOLETR       4 00001700 00000001  I                     2547  2529B
IDSEARCH       4 00001744 00000001  I                     2571  2539B
IDSELSE        4 00001730 00000001  I                     2562  2575
IDVALCHK       4 0000178E 00000001  I                     2597  2587B
IEQUAL         4 00000AE6 00000001  I                     1421  1408B
IER            4 00001592 00000001  I                     2396  2348  3577B 3633B
IERCOMMA       4 000015A6 00000001  I                     2403  2418B 2421B 2567B
IERSELSE       4 000015D4 00000001  I                     2415  2404
IERSPEC        4 00001588 00000001  I                     2390  1566B 1569B 2322B 2557B 3569B
IERSPECA       4 00001598 00000001  I                     2400  2394B
IEX11000       1 00000000 00000001  J                      169   219U 5586
IGC            2 00000D4C FFFFFFFF  H H                   5423   290M 1780  1782M 1784  1807  1813  2228  2231M 2232  2266
                                                                 2268  2277  3458  3460M 3461  3464  3531
ILPAR          4 00000AF6 00000001  I                     1427  1412B
INCR           4 00000214 00000001  I                      391   395B
INCRA          6 00000218 00000001  I                      392   398
INT            5 00002D6C 00000001  X X                   5040  1640
IRPAR          4 00000ADE 00000001  I                     1418  1406B
ISO            1 00000010           U                     5159  1383
ISOTRANS       4 00000AA2 00000001  I                     1402  1384B
ITABC          4 00001084 00000001  F F                   2068  2044  3894
ITABCLEA       4 0000095A 00000001  I                     1271   740B 1817B 1963B 2279B 2358B 2369B 2744B 2810B 3063B 3086B
                                                                 3094B 3527B 3619B
ITABCLEB       2 00000970 00000001  I                     1279  1274B
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Symbol    Length    Value     Id     Type Asm  Program     Defn  References                      X390 3.1.04  2012/08/17 13.12

ITABCLEC        4 00000962 00000001  I                     1273   703B 1966B 2407B 2982B 3539B
ITABLEN         4 00000D78 FFFFFFFF  F F                   5434  2016M 2027  2063
ITAB10S         4 000000E4 FFFFFFFF  F F                   5227   232   266
KB              2 00000CB8 FFFFFFFF  H H                   5407  2412M 2508M 2616  2625M 2689M 2690M 3362M 3363M
KEYTAB          4 00002BF0 00000001  X X                   4945   390
KEYWDL01        1 000029B8 00000001  R A                   4742  4714
KEYWDL02        1 000029C1 00000001  R A                   4750  4715
KEYWDL03        1 000029D1 00000001  R A                   4761  4716
KEYWDL04        1 000029EA 00000001  R A                   4775  4717
KEYWDL05        1 00002A2A 00000001  R A                   4804  4718
KEYWDL06        1 00002A7B 00000001  R A                   4836  4719
KEYWDL07        1 00002A8E 00000001  R A                   4844  4720
KEYWDL08        1 00002AC1 00000001  R A                   4861  4721
KEYWDL09        1 00002ACD 00000001  R A                   4866  4722
KEYWDL10        1 00002ADA 00000001  R A                   4871  4723
KFCONST         4 00002D0C 00000001  F F                   5014  3859
KF0             4 00002D0C 00000001  F F                   5015   249   840  2412  2530  2578  2625  2926  3010  3040  3470
                                                                 3883
KF1             4 00002D10 00000001  F F                   5016  2726  2915  3229  3306
KF11            4 00002D38 00000001  F F                   5026   549   572   956  1472  1953  2011  2444  3535  3665
KF2             4 00002D14 00000001  F F                   5017  1586
KF2000          4 00002D50 00000001  F F                   5035  2017
KF25000         4 00002D4C 00000001  F F                   5034  3868
KF256           4 00002D68 00000001  F F                   5039  2051  2056  2057
KF3             4 00002D18 00000001  F F                   5018  1580  2440
KF4095          4 00002D54 00000001  F F                   5036  3225  3238  3311
KF6             4 00002D24 00000001  F F                   5021   609   677  1044  1228  2336  2540
KF7             4 00002D28 00000001  F F                   5022  3861
KH4096          2 00002D58 00000001  H H                   5037   229   719  3126  3448
KH7             2 000008B2 00000001  X X                   1205  1185  1369
KOPOOLAA        4 00002430 00000001  I                     3874  3869B
KOPOOLRL        4 000023F6 00000001  I                     3858  1004B 3841B 3855B
KP1             1 00002D8C 00000001  P P                   5046  4084
KWARRAY         5 00002A3B 00000001  X X                   4812  1559
KWELSE          4 00002A00 00000001  X X                   4786  1577  1578
KWEND           3 000029D2 00000001  X X                   4763  1584
KWLUTAB         4 00002990 00000001  A A                   4714  1475  1517
KWPROC          9 00002ACE 00000001  X X                   4868  1555
LABCHECK        4 00000464 00000001  I                      671   674B
LABCHK1         4 00000474 00000001  I                      676   672B
LABCRT01        4 000004E8 00000001  I                      726   720B
LABEL           4 0000042E 00000001  I                      657   646B  652B
LABEL01         6 0000040A 00000001  I                      645   619B
LABEND          4 000004C4 00000001  I                      715   670B
LABID           4 0000045A 00000001  I                      668   678B  683B
LABLAHEI        4 000004EC 00000001  I                      727   716B
LABNAME         4 00000440 00000001  I                      662   688B  691B
LABNAMER        4 00000492 00000001  I                      685   663B
LABNAM01        4 000004A2 00000001  I                      690   686B
LAPIN           4 00000D58 FFFFFFFF  A A                   5426   304M  432M  657   739M  872M 1674M 1700M 1809M
LATBEG          1 0000006C           U                     5199   725  3132  3454  5200
LATNR           1 0000001C           U                     5198  5199
LEFTPARL        4 00001A10 00000001  I                     2883  4174
LETDEL          4 0000052E 00000001  I                      752   615B
LETDELB2        2 00000576 00000001  I                      774   755B
LETDELB3        4 00000594 00000001  I                      785   787B
LETDELE1        4 0000054E 00000001  I                      760   765B
LETDELF4        4 000005AC 00000001  I                      792   796B
LETDEL01        4 00000590 00000001  I                      784   779B
LIGP            4 00000D6C FFFFFFFF  A A                   5431   258M 1786  1811  1816M 1950  1951M 1958  1970  2025M 2093
                                                                 2270  2275  2278M 3466  3528  3533M
LINCNT          2 00000098 FFFFFFFF  H H                   5193   282M
LIST            2 000019C4 00000001  I                     2840  2798B 3179B
LN              2 000000A2 FFFFFFFF  R A                   5200   717   719   726M  732  3124  3126  3133M 3134  3446  3448
                                                                 3455M 3457
LOOP            4 00000AAE 00000001  I                     1405  1430B
LOOPEND         4 00000AFA 00000001  I                     1428  1414B 1416B 1419B 1422B 1425B
LPARDQAA        4 00001A30 00000001  I                     2891  2887B
LPARDQC3        4 00001A24 00000001  I                     2888  2898B 2901
LPARDQ63        4 00001A38 00000001  I                     2893  2906B
LPBP            4 00000D70 FFFFFFFF  A A                   5432   259M  730   955  1118  1799  1812  1815M 2015  2023  2024
                                                                 2026M 2091  2245  2307  2443  2614  2714  3122  3441  3530
                                                                 3534M 3664
L3              4 00001F70 00000001  I                     3421  3418B
L3AA            4 00001F82 00000001  I                     3428  3423B
L3BB            4 00001F98 00000001  I                     3436  3431B
L3CC            4 00001FDE 00000001  I                     3455  3449B
MAPOS           6 00000372 00000001  I                      558   553X
MAPOS2          6 00000378 00000001  I                      559   554X
MGESITL         4 00000D7C FFFFFFFF  F F                   5435   291M 3868
MOVBEFWA        6 000003A8 00000001  I                      580   577X
MOVERST         6 000001DA 00000001  I                      360   356X
MOVE4           6 00001120 00000001  I                     2114  2059X
MSBLOOP         4 000001B0 00000001  I                      346   335B
MV1             6 00001ECA 00000001  I                     3345  3249X
MV2             6 00001ED0 00000001  I                     3346  3317X
N               1 00000D86 FFFFFFFF  C C                   5442  2726M 2812  2814M 3037  3039M 3040  3176M
NDECK           1 00000020           U                     5156  3517  3874  4046  4049
NEXTERR         4 000000C0 FFFFFFFF  A A                   5211   912M 1173  1179  1180M
NEXTMOD         2 00002540 00000001  H H                   3976  3972B
NLOAD           1 00000040           U                     5153  3517  3874  4046
NOFREE          1 00000020           U                     5467  3795  3958
NOLETTER        4 0000210C 00000001  I                     3561  3483B
NOMATCH         4 00000B6A 00000001  I                     1494  1485B
NOPBN0          4 000023D6 00000001  I                     3849  3845B
NOPBN0A         4 000023F2 00000001  I                     3857  3853B
NOPRINT         6 00000A88 00000001  I                     1395  1387B
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Symbol    Length    Value     Id    Type Asm  Program    Defn  References                      X390 3.1.04  2012/08/17 13.12

NOPROCBY       4 00001442 00000001  I                    2262  2256B 2260B
NORIP          4 00001E0C 00000001  I                    3280  3276B
NORMAL         4 00000CAE 00000001  I                    1627  4880
NOSC           1 00000008           U                    5178  3968
NOSEMC         4 0000166C 00000001  I                    2464  2458
NOTFOUND       4 00001784 00000001  I                    2591  2579B
NOUPDAT        4 00000272 00000001  I                     417   412B  415B
NPAFTAPA       2 000003C8 00000001  I                     597   592B
NPAFTAPO       4 000003AE 00000001  I                     588  4167
NSRCE          1 00000080           U                    5150  1371  1386
ODECB          4 000009D0 00000001  F F                  1331  1323
ONC            1 00000D85 FFFFFFFF  C C                  5441   286M  293M  430   645   650   737   754   777   869  1311
                                                               1319  1352  1354M 1671  1698  3852
OPIN           4 00000D88 FFFFFFFF  A A                  5443   303M  305M  428M  430M  645   648   735M  737M  754   756
                                                                766   775   784   868M  869M 1670M 1671M 1697M 1698M
OPINCHAR       1 00002DB2 00000001  C C                  5051   429M  660   715   736M  752   867M 1672M 1696M
OUTAREA2       4 000000AC FFFFFFFF  F F                  5203  4064  4074M
PAGEHD1      121 0000010C FFFFFFFF  C C                  5242  5243  5247
PAGEHD1D     100 00000117 FFFFFFFF  C C                  5246   280M
PAGEHD2      121 00000185 FFFFFFFF  C C                  5252  5253
PAGEHD2D     100 00000190 FFFFFFFF  C C                  5256   281M
PAGEHD3      121 000001FE FFFFFFFF  C C                  5259  5260
PAR            4 000021B6 00000001  I                    3627  3615B
PARAM3         2 00000722 00000001  X X                   984   978
PBC            1 00000D84 FFFFFFFF  C C                  5440   292M 1790  1796  1798M 1814  3430  3436  3439M 3532  3864
PBLCKEAA       4 00000FBC 00000001  I                    2011  2013B
PBLCKEND       4 00000FB8 00000001  I                    2010   881B 1847  1860B 1873B 1875B 1915B 1930B 2462B 2470B 2474B
                                                               3776  3778  3779  3780
PBN            2 0000009E FFFFFFFF  H H                  5196  3864M
PBTAB1       255 00000478 FFFFFFFF  C C                  5339   299M 1800  3440  5340
PGMEND         4 00001108 00000001  I                    2106  1898B 2103B
PIDENT         4 000000B0 FFFFFFFF  C C                  5204  4014M 4083
PNAMERR        4 00002156 00000001  I                    3585  3575B
PNAMERRA       4 0000215C 00000001  I                    3589  3583B
POINT          4 000002A6 00000001  I                     446  4160
PONTLST        4 000019D6 00000001  I                    2852  2859  4181
PONTPAR        2 0000074C 00000001  X X                  1022  1015
POOLLEN        4 00000CBC FFFFFFFF  F F                  5408   234M 3960
POOLLOC        4 00000CC0 FFFFFFFF  F F                  5409   242M 3858  3961
PPARLST        2 0000074A 00000001  X X                  1021  1012
PRELPOOL       1 00000278 FFFFFFFF  C C                  5277  5210  5211  5278  5336
PREND          4 00000ECC 00000001  I                    1871  1845
PRIMPAR        4 00000D60 FFFFFFFF  A A                  5428  2578  2580  3470M 3685M
PRNTREC        4 00000A8E 00000001  I                    1396  1393B
PROC           1 00000004           U                    5135  1600  1737
PROCDEL        4 00002252 00000001  I                    3699  3649
PROCEAG1       4 00001F5C 00000001  I                    3416  3377B
PROCEDAA       4 00001F44 00000001  I                    3410  3406B
PROCEDUR       4 00001F28 00000001  I                    3403  1604B 4895
PROCEND        4 0000218E 00000001  I                    3616  3628B
PROCESD        1 00000008           U                    5469  3420  3514
PROCFIN        4 000021D2 00000001  I                    3648  2420B 3622B
PROCID         4 0000202C 00000001  I                    3481  3544B 3562B 3563  3568  3576  3625B 3632  3737B
PROCIDSE       4 00002176 00000001  I                    3596  3592
PROCOFF        1 000000F7           U                    5470  3516
PROG1          4 00000EA4 00000001  A A                  1842  1839
PROG2          4 0000061C 00000001  A A                   854   851
PRPT           4 000000A4 FFFFFFFF  F F                  5201   289M 3221  3223  3327  3328M 3342M 3860  3862M 3863M 3885
PRTRTADD       4 000000B8 FFFFFFFF  A A                  5206  1373
PTTABLE        1 00002758 00000001  R A                  4194   449  2854
PUNCHOUT       6 00002630 00000001  I                    4080  4060B
PUT1           2 000025EA 00000001  I                    4054  4050B
PUT1A          4 000025E6 00000001  I                    4051  4075B
PUT2           4 00002614 00000001  I                    4067  4078B
PZ             1 00000D8D FFFFFFFF  C C                  5445   487   878  1724  1872  2259  2433  2617  2619M 3472M 3616
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PZETA          4 000019EC 00000001  I                    2859  4176
QUOTE          4 00001DF4 00000001  I                    3273  4183
READROUT       4 00002376 00000001  I                    3803  2205B
REPL           3 00001EE0 00000001  C C                  3351  3277M 3282M 3301  3346
RIGHTPAR       4 00000280 00000001  I                     426  4157
RIGTPARL       4 000019F4 00000001  I                    2867  4175
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SCALE           4 0000031A 00000001  I               519  4168
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SCPATTN         6 00002DBF 00000001  X X            5054  1390  1391
SCTAB         256 00001126 00000001  X X            2116  1805  2033  3444
SCTRANS         4 00000644 00000001  I               866   855   856   858   892B
SCTRANSA        4 00000648 00000001  I               867   864B  885B
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SCYES3A         4 00002204 00000001  I              3664  3657B
SEMCLAA         4 00001AD8 00000001  I              2963  2956B
SEMCLER         4 00001AF4 00000001  I              2977  2951B
SEMCLST         4 00001ABE 00000001  I              2950  4170
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SEMC60          4 000005D0 00000001  I               832  4184
SEMPROC         4 00000670 00000001  I               877   857
SEMPROC2        4 00000680 00000001  I               881   859   879B  888B
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SET60           1 00000002          U               5183   832
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SIMPLPAR        4 00001A42 00000001  I              2897  2890B
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SLASHERR        4 00001C1A 00000001  I              3090  3074
SLASHLAA        4 00001B64 00000001  I              3031  3024B
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                                                               3761  3786  3788M
SPEC           4 00001692 00000001  I                    2487  4892
SPECENT        4 000016A4 00000001  I                    2507  2296B 2488B 2705B 3113B 3404B
SPIC           1 00000040           U                    5175  3857
SPTAB        255 000005D0 FFFFFFFF  C C                  5398   301M 2243
SQC            4 00001ED8 00000001  F F                  3348  3229M 3300  3308M
SRCE1ADD       4 000000C8 FFFFFFFF  F F                  5213   268   272   273
SRCE1S         4 000000E0 FFFFFFFF  F F                  5225   231   256   269  1349  5226
SROUT          4 00001DEE 00000001  I                    3251  3236B
STACKTST       4 00000694 00000001  I                     887   848
STAREND        4 00000EC0 00000001  I                    1857  1846
STARTBIT       1 00000020           U                    5458  1524  3753
STARTDEL       4 00000C54 00000001  I                    1596  1489B 1525B
STATE          4 000002DE 00000001  I                     481   471B  741B 1658B
STEPUP         4 00002320 00000001  I                    3768  3763B 3765B
STRAAA         4 00001D9C 00000001  I                    3228  3226B
STRBBB         2 00001DCC 00000001  I                    3241  3239B
STRING         4 00001D70 00000001  I                    3218  4881
STRTABLE      96 00002B90 00000001  X X                  4922  3233  4923  4925
SUBROUT        4 000001AA 00000001  I                     339   331B  358B
SWCOLON        4 00001CE4 00000001  I                    3161  3146B 3151B 3165B 3168
SWITCH         4 00001C28 00000001  I                    3112  4893
SWITCHAA       4 00001C44 00000001  I                    3119  3115B
SWITCHBB       4 00001C76 00000001  I                    3133  3127B
SWITCHER       4 00001D4C 00000001  I                    3194  3148B 3157B 3167B
SWPOINT        4 00001CB8 00000001  I                    3149  3155B 3158
SWTCHB3        4 00001C90 00000001  I                    3139  3182B 3185
SWTCHNAA       4 00001D42 00000001  I                    3188  3184B
SWTCHNBB       4 00001D5E 00000001  I                    3201  3192B
SWTCHNSE       4 00001D2A 00000001  I                    3181  3141B
SYSUT1         4 00000578 FFFFFFFF  F F                  5347  1318
TARYDHB3       4 0000185A 00000001  I                    2689  2678B
TED            4 00000D02 00000001  I                    1665  1581B 4882
TERBIT         1 00000001           U                    5454  3759
TERMBGN        4 00002354 00000001  I                    3783  3777
TERMBRNC       4 0000232C 00000001  I                    3771  3767B
TERMSEAC       4 00002300 00000001  I                    3760  3760  3789B
TERMTAB        4 00002338 00000001  A A                  3775  3772
TERR           1 00000008           U                    5145  1003  3840  3937  3969
TESTAPOS       4 00001E2C 00000001  I                    3290  3278B 3283B
TESTISO        4 00000A56 00000001  I                    1383  1432B
TESTLOOP       2 00000174 00000001  I                     322   311B  366B  434B  524B  875B 1034B 1077B 1540B 1712B 1744B
                                                               1747  2211B 2281B 2746  3087
TESTPAR        4 00002242 00000001  I                    3682  3676B
TESTPARA       4 00002246 00000001  I                    3683  3680B
TESTTABL       1 00002872 00000001  R A                  4496   326
TESTZETA       4 00001E1C 00000001  I                    3285  3281B
TLISTSE        4 0000154E 00000001  I                    2343  2335B
TPROHEAA       6 000020FA 00000001  I                    3556  3551B
TPROHEAD       4 000020E4 00000001  I                    3548  3537B
TPSPECER       4 00000C0C 00000001  I                    1563  1039B
TPSPEC01       4 00000C1C 00000001  I                    1568  1564B
TRANSOP        4 00000210 00000001  I                     390  4149  4150  4151  4152  4153  4154
TREXTINT       1 00002C0C 00000001  R A                  4957  1398  4958  4960  4963  4965  4968  4970  4972  4974  4976
                                                               4978  4980  4983  4986  4989  4991  4993  4996  4999  5002
TRINTEXT       1 0000292E 00000001  C C                  4699  2453  3521  4700  4702  4704  4706
TROE           4 0000024A 00000001  I                     406   393B
TRONE          4 0000023A 00000001  I                     401   397B
TSTMORE        4 00000266 00000001  I                     414   410B
TXTT           1 0000269E 00000001  X X                  4116  4019  4089
TYPE           4 00001496 00000001  I                    2295  1612B 4886
TYPEAA         4 000014B2 00000001  I                    2302  2298B
TYPEARAA       4 0000184A 00000001  I                    2684  2680B
TYPEARRY       4 0000182E 00000001  I                    2677  1560B 4896
TYPEBB         4 000014F6 00000001  I                    2319  2315B
TYPECC         4 00001506 00000001  I                    2324  2320B
TYPECOMA       4 00001576 00000001  I                    2368  2346B
TYPEDAFI       4 000014D2 00000001  I                    2309  1565  2313B 2316  2321  2347  2371B
TYPENAME       4 0000150E 00000001  I                    2327  2311B
TYPENM02       4 00001524 00000001  I                    2332  2337B 2341B 2344B
TYPENM03       4 00001528 00000001  I                    2333  2331
TYPEPREA       4 00000C80 00000001  I                    1609  1621B
TYPEPREC       4 00000C7C 00000001  I                    1608  1615B
TYPEPR01       4 00000C74 00000001  I                    1606  1603B
TYPEPR02       4 00000C8E 00000001  I                    1614  1610B
TYPESPEC       6 00000BF0 00000001  I                    1555   521B  589B 1478B 1511B
TYPPROC        4 00001EE4 00000001  I                    3360  1556B 4897
TYPPROCA       4 00001EF8 00000001  I                    3366  3361B
TYPPROCB       4 00001F0C 00000001  I                    3371  3367B
VALDLB2        4 000017FE 00000001  I                    2647  2598B
VALDLB3        4 00001810 00000001  I                    2655  2648B
VALDLB4        4 00001826 00000001  I                    2664  2656B
VALUE          4 000017E4 00000001  I                    2636  4891
VALUERR        4 000017F4 00000001  I                    2641  2637B
WA            80 00000CF3 FFFFFFFF  C C                  5420   574  1379  1392  1395  1397  1398M 1403  3244
WABEFOR        7 00000CEC FFFFFFFF  C C                  5419  1370M
WADDARI        4 00000D74 FFFFFFFF  A A                  5433   274M  673   687   790   797  1317  1347M
WORKAREA       1 00000000 FFFFFFFF  J                    5062   226U
WRITEOB        4 000009CC 00000001  I                    1330  1320B
```

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Symbol    Length    Value     Id     Type Asm  Program    Defn  References                               X390 3.1.04  2012/08/17 13.12

WRT            4 00001046 00000001  I                     2050  2112B
WRTITAB        4 00000FCC 00000001  I                     2015  3848B
WRTITABA       6 00000FE2 00000001  I                     2023  2018B
WRTITABB       4 00001028 00000001  I                     2039  2036B
WRT1           4 00001118 00000001  I                     2111  2040B
XFA            1 00000040           U                     5478   662   786   792  2310  3482  3701  4704  4981  4994
XFAMPER        1 00000023           U                     5540  4962
XFASSIGN       1 00000016           U                     5556   468  3172
XFASTER        1 00000002           U                     5529  4946  4966
XFAT           1 0000005D           U                     5510  4977
XFB            1 00000041           U                     5479  4981  4994
XFBLANK        1 0000002B           U                     5544   263   375   394   616   690  1251  1261  1614  1962  1969
                                                                2028  2312  2343  2547  2571  2728  2749  2782  2897  3044
                                                                3067  3143  3154  3164  3181  3486  3561  3707  3714  3724
                                                                4700  4959
XFC            1 00000042           U                     5480  4981  4994
XFCOLON        1 00000007           U                     5532  2937  3145  3705  4975
XFCOMMA        1 00000025           U                     5541   767  1259  2345  2415  2573  2734  2825  2921  3057  3060
                                                                3614  3621  3623  3735  4969
XFD            1 00000043           U                     5481  4981  4994
XFDECPT        1 0000003E           U                     5564   458
XFDELTA        1 00000029           U                     5561   863   884  2148  2441
XFDOLLAR       1 0000005A           U                     5507  4706  4964
XFE            1 00000044           U                     5482  4981  4994
XFEND          1 0000002C           U                     5562  1892  3784  4957
XFEQUAL        1 00000010           U                     5535   612  3152  3162  4949  4950  4951  4979
XFF            1 00000045           U                     5483  4981  4994
XFFOR          1 00000018           U                     5558  2230  2264
XFG            1 00000046           U                     5484  4982  4995
XFGT           1 00000012           U                     5537  4950  4973
XFH            1 00000047           U                     5485  4982  4995
XFHASH         1 0000005C           U                     5509  4977
XFI            1 00000048           U                     5486  4982  4995
XFJ            1 00000049           U                     5487  4984  4997
XFK            1 0000004A           U                     5488  4984  4997
XFL            1 0000004B           U                     5489  4984  4997
XFLABEL        1 00000027           U                     5560   715   734   736
XFLBRAC        1 00000006           U                     5531   614  2730  2905  3280  3509  3525  3722  4948  4961
XFLSQBR        1 00000008           U                     5533   414  2732  2777  2795  2886  2892  4948  4990
XFLT           1 00000011           U                     5536  4949  4961
XFM            1 0000004C           U                     5490  4984  4997
XFMINUS        1 00000001           U                     5528  4967
XFN            1 0000004D           U                     5491  4984  4997
XFNOT          1 00000020           U                     5538  4951  4966
XFO            1 0000004E           U                     5492  4984  4997
XFOR           1 00000022           U                     5539  4962
XFP            1 0000004F           U                     5493  4985  4998
XFPERIOD       1 0000002D           U                     5545  1249  2472  3147  3150  3709  3712  4908  4961
XFPLUS         1 00000000           U                     5527  4961
XFPOWER        1 00000005           U                     5555  4946
XFQ            1 00000050           U                     5494  4985  4998
XFQUOTE        1 0000002E           U                     5546   361   526  1609  2319  2554  3292  4910  4923  4979
XFR            1 00000051           U                     5495  4985  4998
XFRBRAC        1 00000026           U                     5542   427   429   660   752  2419  2868  2999  3275  3627  3653
                                                                4947  4966
XFRSQBR        1 00000028           U                     5543   409  2996  3002  4947  4992
XFS            1 00000052           U                     5496  4987  5000
XFSCOLON       1 0000000B           U                     5534   866   867  1247  4906  4966
XFSLASH        1 00000003           U                     5530  2780  2889  3052  4947  4948  4967
XFT            1 00000053           U                     5497  4987  5000
XFU            1 00000054           U                     5498  4987  5000
XFUNDER        1 0000005B           U                     5508  4971
XFV            1 00000055           U                     5499  4987  5000
XFW            1 00000056           U                     5500  4987  5000
XFX            1 00000057           U                     5501  4987  5000
XFY            1 00000058           U                     5502  4988  5001
XFZ            1 00000059           U                     5503  4988  5001
XFZETA         1 0000002F           U                     5563   363   396   618   671   685   788  1225  1253  1263  1308
                                                                1399  1616  2314  2333  2537  2549  2751  2784  2899  3046
                                                                3069  3156  3166  3183  3285  3294  3564  3703  3716  3726
                                                                3806  4912  4925
XF0            1 00000030           U                     5514  4702  5003
XF1            1 00000031           U                     5515  5003
XF2            1 00000032           U                     5516  5003
XF3            1 00000033           U                     5517  5003
XF4            1 00000034           U                     5518  5003
XF5            1 00000035           U                     5519  5003
XF6            1 00000036           U                     5520  5004
XF7            1 00000037           U                     5521  5004
XF8            1 00000038           U                     5522  5004
XF9            1 00000039           U                     5523   761  2528  2722  3140  5004
ZETAAPO        2 0000038A 00000001  I                      569  4172
ZFSNMAX        1 00000D83 FFFFFFFF  C C                   5439  3867M
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```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)                 X390 3.1.04  2012/08/17 13.12

    0(0)   235M  333M  334   338   843M  882M  890M 1302  1309  1356M 1368  1379M 1396M 1638M 1693M 1967M 2029  2082M
          2088M 2226M 2449M 3218M 3237M 3238  3244M 3246  3310M 3311  3371M 3410M 3549M 3550  3927M 3932M 3960M 4027M
          4028  4032  4035  4036
    1(1)   229M  230M  231M  232M  233M  234   235   239M  242   247   248M  249   250M  251   252M  253   254M  255
           256M  257   258   259   260   261   262   263   264   266M  267   324   326M  329   361   363   365M  374M
           375   377M  379M  391M  392   394   396   419M  433M  446M  449M  469M  504   505M  508M  522   543   544M
           545   570   597   598M  608   611M  612   614   616   618   769M  800M  874M  928M 1038M 1041M 1044M 1045
          1046M 1076M 1184  1217  1220  1224M 1225  1231  1233  1245M 1247  1249  1251  1253  1258M 1259  1261  1263
          1309  1323M 1324  1330M 1338N 1339N 1340N 1356M 1368  1369M 1370  1375  1376M 1380  1385M 1390  1391  1392
          1396M 1397M 1399  1464  1530M 1545M 1608M 1609  1611M 1614  1616  1631M 1645M 1657M 1675M 1711M 1743M 1748M
          2029  2044M 2045  2067M 2075N 2076N 2077N 2078N 2082M 2157M 2160M 2210M 2280M 2309M 2310  2312  2314  2319
          2328  2332M 2333  2338  2343  2345  2403M 2415  2419  2460M 2471M 2472  2473M 2527M 2528  2533  2536M 2537
          2542  2547  2549  2554  2571  2573  2721M 2722  2728  2730  2732  2734  2749  2751  2777  2779M 2780  2782
          2784  2793M 2797M 2841  2844M 2852M 2854M 2870M 2886  2888M 2889  2893M 2897  2899  2923M 2939M 2996  2998M
          2999  3004M 3044  3046  3056M 3057  3067  3069  3139M 3140  3143  3145  3147  3149M 3150  3152  3154  3156
          3161M 3162  3164  3166  3178M 3181  3183  3228M 3231  3233M 3234  3273M 3275  3280  3285  3290M 3292  3294
          3299M 3481M 3482  3486  3509  3561  3564  3596  3614  3621  3627  3648M 3700M 3701  3703  3705  3707  3709
          3711M 3712  3714  3716  3721M 3722  3724  3726  3731M 3803M 3805M 3806  3842M 3843M 3844  3865M 3866M 3867
          3883  3894M 3895  3903M 3905N 3906  3913M 3915N 3916  3920M 3921  3922  3924M 3925M 3927M 3928M 3931M 3932
          3933M 3942M 3944N 3945  3952M 3954N 3955  3961M 3965M 4021M 4022  4024  4027  4033  4036M 4048M 4051M 4054M
          4055  4058  4065M 4066  4067M 4070M 4071  4074  4080  4081  4082  4083  4085  4086  4087  4088  4091N 4092
          4107  4109  4111N 4127
    2(2)   285M  286   287   290   291   292   293   294   295   296   297   298   299   300   301   302   305   325M
           326M  339N  378M  379M  390N  448M  449M  450N  507M  508M  510N  544M  650M  651   667M  677   682M  777M
           778   850M  851N  967  1193M 1194  1197M 1198  1222M 1228  1235M 1309  1345M 1346N 1352M 1353M 1354  1356M
          1368  1396M 1486M 1491N 1513M 1531M 1532N 1538M 1596  1796M 1797M 1798  1801  1803  1804M 1805N 1838M 1839N
          2029  2030M 2031M 2032M 2033N 2082M 2159M 2160M 2161N 2240M 2241M 2242  2244  2272  2330M 2336  2340M 2843M
          2844M 2853M 2854M 2856  2917M 2918M 2919  3022M 3031M 3032  3232M 3233M 3251N 3436M 3437M 3438  3439  3440N
          3443M 3444N 3616M 3617M 3618  3771M 3772N 3805M 3878M 3884M 4014  4107  4112B 4127  4129M
    3(3)   268M  269M  270M  271   272M  302   303   304   313   333   338M  347   350M  357M  360   402   403M  407
           409   414   418M  427   428   431M  432   458   459M  468   470M  530   531M  658   669   734   735   738M
           739   758   764   766M  767   768M  795   797M  798   799M  843   863   866   868   870   871M  872   882
           884   890  1158M 1217  1218M 1231  1232M 1306  1308  1317M 1339  1346M 1347  1348  1629  1630M 1638  1640
          1643  1644M 1655  1656M 1669  1670  1673M 1674  1693  1695  1697  1699M 1700  1772M 1774  1776  1803  1807
          1808M 1809  1892  1893M 1967  1969  1971  1972  1973M 2029  2060M 2082M 2088  2090  2092  2094  2095  2096M
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          2796M 2825  2826M 2868  2869M 2892  2894M 2905  2921  2922M 2937  2938M 3002  3003M 3052  3053M 3060  3061M
          3136  3137M 3172  3173M 3199  3200M 3218  3220  3221  3222M 3371  3373  3410  3412  3461  3462M 3525  3526M
          3572  3573M 3623  3624M 3630  3631M 3653  3654M 3735  3736M 3784  3785M 3850  3851M 4013M 4019M 4022  4024
          4038B 4080  4087  4088  4089  4110M 4111
    4(4)   313   324M  330   352   390M  392   402   407   504M  548   552   555M  558   569   571   574M  575M  580
           647M  648M  649M  651   833M  834   841M  842   848M  881M  959  1139  1466  1498  1530  1545  1555  1559
          1578  1584  1836M 1858M 1910M 1914M 1930M 1977B 2084B 2101B 2104B 2140M 2141M 2142  2144M 2145M 2146  2148
          2150M 2151  2161M 2162B 2459M 2841M 3231M 3235  3245  3760M 3848M 4017M 4042B
    5(5)   219U  220M  221
    6(6)   339M  340B  346M  347M  348M  349   350N  352N  353   450M  451B  510M  511B  522M  525M  526   545M  546M
           552N  593M  608M  609M  610   653M  692M  698M  721M  757M  758   763M  764   774M  775M  776M  778   780M
           836M  851M  852B  924M  969B  978M 1012M 1015M 1065B 1081M 1087M 1100M 1114M 1118M 1119M 1120  1122  1124
          1136N 1142B 1151M 1152  1153M 1170  1171  1172  1199  1226B 1255B 1265B 1275M 1310  1313M 1318M 1338  1355M
          1402  1403M 1404  1405  1407  1409  1411  1413  1415  1418  1421  1424  1427  1428M 1429  1431M 1468M 1491M
          1492B 1526M 1532M 1533B 1541M 1705M 1739M 1779M 1780M 1781M 1782  1783M 1784M 1785M 1787  1788  1789  1792M
          1800M 1801M 1802  1805M 1806  1839M 1840B 1950M 1951  1958M 1959  1970M 1971  2019M 2024M 2025  2026  2027
          2028  2031  2034  2037  2038  2053  2054M 2085M 2086  2087  2091M 2092  2093M 2094  2114  2153M 2186M 2236M
          2251M 2305M 2306  2307M 2308  2348M 2390M 2396M 2404M 2458M 2464M 2468M 2469  2476M 2490M 2562M 2575M 2591M
          2601M 2614M 2615  2617M 2618M 2619  2641M 2649M 2657M 2714M 2715  2716M 2717  2727M 2736M 2756M 2789M 2812M
          2813M 2814  2855M 2856M 2856N 2857B 2871M 2872M 2873  2883M 2884M 2885  2957M 2964M 2965M 2966M 2967  2977M
          3005M 3006M 3007  3025M 3033M 3034  3035M 3036  3074M 3090M 3128M 3142M 3174M 3175  3177  3188M 3194M 3201M
          3202  3203  3242M 3243N 3247M 3248N 3314M 3315M 3315N 3329M 3330N 3336M 3346  3424M 3432M 3441M 3442  3450M
          3484M 3511M 3552M 3579M 3585M 3592M 3649M 3658M 3666M 3667M 3668M 3669  3672M 3673  3739M 3755M 3768M 3769M
          3770  3772M 3773B 3812M 3814M 3815  3860M 3861M 3862  3870M 3876M 3899M 3905  3909M 3915  3920  3936M 3944
          3954  3971M 4091  4128M
    7(7)   664M  665   666M  680   681M  952M  955M  956M  960M  963M 1139M 1155M 1195  1203  1219M 1220  1221M 1233
          1234M 1279M 1642M 1643  1654M 1655  1786M 1787  1799M 1802  2033M 2034  2050M 2053  2055M 2060  2061M 2076
          2114  2327M 2328  2329M 2338  2339M 2400M 2401  2402  2531M 2533  2534M 2542  2543M 2684M 2685  2686  2711M
          2712  2713  2715  2716  2963M 2968  3234M 3235M 3237N 3241M 3249  3250N 3287M 3296M 3309M 3310N 3316M 3317
          3318N 3466M 3467  3589M 3590  3591  3858M 3859
    8(8)   219U  221M  222M  223
    9(9)   283M  323M  398M  447M  506M  556B  620M 1160B 1223M 1246M 1257M 1400B 1475M 1480M 1481  1482M 1486  1494M
          1498  1517M 1518M 1519  1520M 1531  1535M 1577M 1618  1619M 1620M 1628M 1629  1642  1654  1668M 1669  1672
          1747M 1818B 2158M 2161  2299  2300M 2301M 2305  2316M 2331M 2368M 2370  2469  2507  2535M 2551M 2681  2682M
          2683M 2708  2709M 2710M 2753M 2786M 2809M 2811  2842M 2859M 2901M 3048M 3062M 3064  3071M 3116  3117M 3118M
          3158M 3168M 3185M 3230M 3274M 3291M 3327M 3330  3331  3368  3369M 3370M 3407  3408M 3409M 3563M 3699M 3718M
          3728M 3804M
   10(A)   322M  323   376B  380B  404B  420B  460B  484B  488B  490B  532B  704B  770B  801B  929B  982B 1019B 1091B
          1546B 1632B 1646B 1677B 2746M 2840M 2842  2874B 2895B 2924B 2940B 3009B 3011B 3054B 3087M 3333B
   11(B)   219U  223M  224M
   12(C)   227M  228   243M  244   245M  246   264M  265   275M  276   288M  289   306M  307   308M  309M  310   332M
           351M  352M  360   401M  406M  408M  411M  416M  417   426M  457M  467M  489M  529M  703M  733M  740M  844M
           880M  883M  891M  964   965M  966M  968M  977   979M  981M  995M 1016  1017M 1018M 1042  1043M 1047M 1062
          1063M 1064M 1121B 1134  1135M 1136  1137M 1141M 1150  1154M 1159M 1186B 1200B 1216M 1230M 1248B 1260B 1283B
          1303B 1307B 1357B 1627M 1639M 1653M 1667M 1694M 1726M 1817M 1874M 1891M 1963M 1966M 1968M 2089M 2107M 2108
          2187M 2227M 2243M 2244M 2246  2248M 2249  2255  2257  2261M 2262M 2263M 2264  2265  2266M 2267M 2268M 2269M
          2271  2272N 2273  2279M 2349M 2358M 2369M 2405M 2407M 2435M 2450M 2461M 2576M 2580M 2586  2588M 2589  2599
          2615  2616  2620  2622  2647  2655  2661  2664  2718M 2740M 2744M 2773M 2774  2775M 2776  2794M 2810M 2824M
          2867M 2891M 2904M 2920M 2936M 2982M 3001M 3037M 3038M 3039  3051M 3059M 3063M 3075M 3086M 3094M 3122M 3123
          3124M 3125M 3132M 3133  3135M 3171M 3198M 3219M 3227M 3240M 3245M 3246M 3248M 3251M 3252B 3300M 3303M 3306M
          3308  3313M 3330M 3332  3343B 3345  3372M 3411M 3512M 3524M 3527M 3539M 3571M 3593M 3598M 3619M 3620M 3629M
          3650M 3651M 3734M 3783M 3813M 3849M 3854M
   13(D)   226U  964   968M  977   981M 1016  1018M 1042  1047M 1062  1064M 1134  1141M 1150  1159M
   14(E)   547M  548M  549   551M  553   554   570M  571M  572   575   576M  577   657M  658   662   665   668M  669
           671   673M  680   685   687M  690   730M  731   756M  757   760M  761   763   784M  785M  786   788   790M
           792   794M  795   964   968M  977   981M 1016  1018M 1042  1047M 1062  1064M 1134  1135  1138M 1140  1141M
          1150  1151  1156M 1157  1159M 1174M 1175  1180  1184M 1185M 1309  1324M 1325  1326M 1342M 1348M 1349M 1350M
          1351  1356M 1368  1374M 1381M 1396M 1464M 1465M 1466M 1472  1474M 1479M 1480N 1483M 1484  1486N 1494M 1515M
          1516M 1518N 1521M 1522  1530N 1531N 1535N 1537M 1580  1586  1628N 1642N 1654N 1668N 2029  2041  2045M 2046
          2047M 2049M 2063M 2077  2080M 2082M 2305M 2439M 2440M 2441  2507N 2532M 2540  2544M 3223M 3224M 3225  3237
          3243  3250M 3310  3315  3318M 3328  3331M 3332  3341M 3342  3416M 3417  3421M 3422  3428  3429  3440M 3442
```

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)           X390 3.1.04  2012/08/17 13.12

          3444M 3445  3446M 3447M 3454M 3455  3652M 3684B 3686B 3743M 3886M 3895M 3896  3897M 3923M 3926M 3927  4012M
          4017  4018M 4029  4031  4037M 4040M 4045  4056M 4059M 4064M 4066  4072M
  15(F)    215B  220   329M  330M  333N  336M  337   353M  354M  355M  356   357N  482M  483   485   543M  546   547
           552M  555   559   569M  580   597M  702M  717M  718M  725M  726   727M  728   729   731   732   849M  850
           887   909   910   911M  912   964   968M  977   980   981M 1016  1018M 1042  1045  1047M 1062  1064M 1134
          1141M 1150  1159M 1173M 1174  1179M 1181  1182  1183  1198M 1199  1203  1271M 1272M 1273  1279  1280  1281
          1282  1309  1325M 1326B 1340M 1341M 1342B 1356M 1368  1373M 1374B 1380M 1381B 1388M 1389  1396M 1404M 1429
          1463M 1481M 1495M 1514M 1519M 1536M 1565M 1568M 1690M 1691  1702M 1703  1709  1710  1722  1777M 1778  1810M
          1811  1812  1813  1814  1815  1816  1837M 1838  1894M 1895M 1896  1897  1899  1907M 1908  1917  1952M 1953M
          1954  1957M 1959  1960  1961  1962  1974M 1975M 1976  2010M 2011M 2012  2014M 2015M 2016  2017  2029  2041
          2046M 2047B 2049M 2051  2056M 2057  2059  2060N 2062M 2075  2078M 2079M 2080B 2082M 2097M 2098M 2099  2102
          2228M 2229M 2231  2245M 2246  2270M 2271  2274M 2275  2276  2277  2278  2302M 2303  2304  2306  2308  2321M
          2347M 2370  2406M 2416B 2436M 2437  2443M 2444M 2445  2446  2448  2452  2507M 2508  2556M 2566M 2743M 2811
          2981M 3064  3119M 3120  3121  3123  3134  3243M 3345  3374M 3375  3376  3413M 3414  3415  3438  3456M 3457
          3458M 3459M 3460  3463M 3464M 3465M 3467  3468  3469  3519M 3520  3528  3530  3531  3532  3533  3534  3535M
          3536  3538M 3548  3549  3556  3557  3558M 3568M 3576M 3632M 3664M 3665M 3670  3675  3677  3679M 3682M 3685
          3761M 3762  3764  3766  3771  3786M 3787M 3788  3818  3846M 3896M 3897B 3921M 3925  3926  3929  3933  3978M
          3987M 4026M 4028M 4029  4031M 4032M 4033  4035M 4037  4055M 4056B 4071M 4072B 4125M 4126  4128N 4129N
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| WORKAREA | 00000D91 | FFFFFFFF | 5062 | | PRIMARY INPUT |

```
Con Source       Members                                                                         X390 3.1.04  2012/08/17 13.12

  1 SYS1.MACLIB
               CHECK    CLOSE    DCB      FREEMAIN FREEPOOL GET      GETMAIN  IEZREGS  IHBINNRA IHBINNRB IHBRDWRS
               IHB01    PUT      WRITE    XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
  4 SYSD.ALGOLF.MACLIB
               IEXCGEN  IEXCHAR  IEXENTRY WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text | X390 3.1.04 2012/08/17 13.12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 219 | | USING | Ordinary | 00000001 | 00000000 | 00003000 | 5 | 00FE2 | 3870 | IEX11000,R5,R8,R11 | |
| 219 | | USING | Ordinary | 00000001 | 00001000 | | 8 | 00FDE | 3894 | | |
| 219 | | USING | Ordinary | 00000001 | 00002000 | | 11 | 00E3C | 4130 | | |
| 226 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 13 | 00D90 | 4085 | WORKAREA,R13 | |

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X11    STEPNAME: IEX11    PROCSTEP: X390

Primary input:  lines      1 to    4989 of SYSD.ALGOLF.ASM(IEX11)

SYSLIB library records read: 4392

SYSUT1 work file size: 565730 bytes

SYSUT2 work file size: 365038 bytes

SYSUT3 work file size: 399120 bytes

SYSLIN file records written: 244

TXA000I Return code 0, elapsed time 8.68 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

```
Csect    Rel Addr(hex) Length(dec)

 No uninitialized areas found
```

# IEX20

LEVEL

V2.M01

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX20)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131301.RA000.T1X20.OBJECT
SYSPRINT    JES2.JOB09271.SO0102
SYSUT1      SYS12230.T131301.RA000.T1X20.SYSUT1
SYSUT2      SYS12230.T131301.RA000.T1X20.SYSUT2
SYSUT3      SYS12230.T131301.RA000.T1X20.SYSUT3
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                      2 *                                                                    00002001
                                      3 *        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                 00003001
                                      4 *                                                                    00004001
                                      5 *        FUNCTION/OPERATION -                                        00005001
                                      6 *        EACH ITAB BLOCK IS SCANNED FOR DUPLICATE IDENTIFIERS        00006001
                                      7 *        RELATIVE DISPLACEMENTS IN DSA IS ALLOCATED FOR ALL          00007001
                                      8 *        IDENTIFIERS, EXCEPT PROCEDURES, LABELS AND SWITCHES         00008001
                                      9 *        THE ITAB BLOCKS ARE WRITTEN IN PROGRAM BLOCK NUMBER         00009001
                                     10 *        ORDER TO SYSUT3                                             00010001
                                     11 *        THE ITAB BLOCKS ARE PRINTED ON SYSPRINT IN PROGRAM          00011001
                                     12 *        BLOCK NUMBER ORDER AND WITH THE IDENTIFIERS IN              00012001
                                     13 *        ALPHABETIC FORM WITHIN EACH BLOCK, IF THE OPTION            00013001
                                     14 *        SOURCE IS SPECIFIED                                         00014001
                                     15 *        CREATES PBTAB2                                              00015001
                                     16 *                                                                    00016001
                                     17 *        ENTRY POINT -                                               00017001
                                     18 *        IEX20000 ITAB MANIPULATION - XCTL EP=IEX20                  00018001
                                     19 *                                                                    00019001
                                     20 *        INPUT - THE ITAB BLOCKS ARE READ IN FROM SYSUT3             00020001
                                     21 *                                                                    00021001
                                     22 *        OUTPUT -                                                    00022001
                                     23 *        THE ITAB BLOCKS ARE WRITTEN TO SYSUT3 AND PRINTED ON        00023001
                                     24 *        SYSPRINT IF THE OPTION SOURCE IS SPECIFIED                  00024001
                                     25 *                                                                    00025001
                                     26 *        EXTERNAL ROUTINES - THE PRINT ROUTINE IN IEX00 IS USED      00026001
                                     27 *                                                                    00027001
                                     28 *        EXITS - NORMAL -                                            00028001
                                     29 *        CONTROL IS GIVEN TO IEX21 XCTL EP=IEX21                     00029001
                                     30 *                                                                    00030001
                                     31 *        EXITS - ERROR - N/A                                         00031001
                                     32 *                                                                    00032001
                                     33 *        TABLES/WORKAREA -                                           00033001
                                     34 *        ATAB     - ADDR IS OF THE ITAB RECORDS IN PROGRAM BLOCK     00034001
                                     35 *                   NUMBER ORDER                                     00035001
                                     36 *        TRINTEXT - TRANSLATION OF INTERNAL CHARACTERS TO EBCDIC     00036001
                                     37 *                   CHARACTERS                                       00037001
                                     38 *        TAB      - PRINTING OF HEXADECIMAL DIGITS                   00038001
                                     39 *        WORK     - BUILDING THE PRINT ENTRIES                       00039001
                                     40 *                                                                    00040001
                                     41 *        NOTES -                                                     00041001
                                     42 *        CHARACTER CODE DEPENDENCE                                   00042001
                                     43 *        THE OUTPUT ON SYSPRINT -                                    00043001
                                     44 *        THE IDENTIFIER NAME IS TRANSLATED BY MEANS OF TRINTEXT,     00044001
                                     45 *        WHICH IS A CHARACTER TABLE                                  00045001
                                     46 *        THE HEXADECIMAL PART IS TRANSLATED BY MEANS OF TAB          00046001
                                     47 *        THE REMAINING PARTS DEPEND ON THE INTERNAL                  00047001
                                     48 *        REPRESENTATION OF THE EXTERNAL CHARACTER SET WHICH IS       00048001
                                     49 *        EQUIVALENT TO THE ONE USED AT ASSEMBLY TIME                 00049001
                                     50 *        THE OPERATION OF THE OTHER PARTS OF THE PHASE DOES NOT      00050001
                                     51 *        DEPEND UPON A PARTICULAR INTERNAL REPRESENTATION OF THE     00051001
                                     52 *        EXTERNAL CHARACTER SET                                      00052001
                                     53 *                                                                    00053001
000000                 00000 00898   54 IEX20000 CSECT                                                       00054001
                                     55 *                                                                    00055001
                                     56 *        R1                       PBN                                00056001
                                     57 *        R2                       CALCULATIONS                       00057001
                                     58 *        R3                       PARAMETER FOR CONVERT ROUTINE      00058001
                                     59 *        R3                       DOUBLE WORD POINTER                00059001
                                     60 *        R4                       WORD POINTER                       00060001
                                     61 *        R5                       KEEPS TRACK OF WHEN TO PRINT       00061001
                                     62 *        R5                       HALF WORD POINTER                  00062001
                                     63 *        R6                       BYTE POINTER                       00063001
                                     64 *        R7                       CURRENT IDENTIFIER                 00064001
                                     65 *        R8                       CURRENT BLOCKHEAD                  00065001
                                     66 *        R9                       SCANS FOR DUPLICATES               00066001
                                     67 *        R10                      ARRAY STORAGE ALLOCATIONS          00067001
                                     68 *        R11                      BASE REGISTER                      00068001
                                     69 *        R12                      RETURN FROM CONVERT, PRINT ROUTINE 00069001
                                     70 *        R14                      PBN DURING PRINTING                00070001
                                     71 *        R15                                                         00071001
                                     72 *                                                                    00072001
                                     73 *        INITIALIZATION                                              00073001
                                     74 *                                                                    00074001
                                     75 *        GETMAIN FOR ITAB AND ATAB                                   00075001
                                     76 *        FIRST ENTRY IN ATAB IS MADE ZERO IF NO PBN 0                00076001
                                     77 *        PRINTING OF HEADING LINES IS INITIALIZED IF SOURCE SPECIFIED 00077001
                                     78 *        FPLEN IS MADE 4 IF SHORT SPECIFIED OTHERWISE IT REMAINS 8   00078001
                                     79 *                                                                    00079001
                                     80          IEXENTRY 'IEX20000 LEVEL 2.1 &SYSDATE &SYSTIME'             00080001
                                     81+*                                                                    01-IEXEN
000000 47F0 F026             00026   82+         B     38(,R15)           BRANCH AROUND ID                   01-IEXEN
000004 21                            83+         DC    AL1(33)            LENGTH OF IDENTIFIER               01-IEXEN
000005 C9C5E7F2F0F0F0F0              84+         DC    CL33'IEX20000 LEVEL 2.1 08/17/12 13.13'              +01-IEXEN
                                       +                                            IDENTIFIER               01-IEXEN
                                     85 *                                                                    00081001
                  R:B  00000         86          USING IEX20000,R11                                          00082001
000026 18BF                          87          LR    R11,R15                                               00083001
                  R:D  00000         88          USING WORKAREA,R13                                          00084001
000028 41F0 B6EA             006EA   89          LA    R15,SLUT2              INTERUPT BEFORE GETMAIN        00085001
00002C 50F0 D090             00090   90          ST    R15,ERET                                              00086001
000030 5810 D0E8             000E8   91          L     R1,ITAB20S             ITAB                           00087001
000034 4110 1400             00400   92          LA    R1,1024(,R1)           ATAB                           00088001
000038 1801                          93          LR    R0,R1                                                 00089001
                                     94 *                                                                    00090001
                                     95          GETMAIN R,LV=(0)             GET ITAB ATAB AREAS            00091001
                                     96+*        OS/VS2 RELEASE 4 VERSION -- 10/21/75                        01-GETMA
```

```
  Active USINGs: WORKAREA,R13  IEX20000,R11

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

00003A 4510 B03E             0003E    97+          BAL   1,*+4                     INDICATE GETMAIN      01-GETMA
00003E 0A0A                           98+          SVC   10                        ISSUE GETMAIN SVC     01-GETMA
                                      99 *                                                               00092001
000040 41F0 B6D6             006D6   100           LA    R15,SLUT                                        00093001
000044 50F0 D090             00090   101           ST    R15,ERET          INTERRUPT ADDR AFTER GETMAIN  00094001
000048 5010 DCF0             00CF0   102           ST    R1,AREALOC                                      00095001
00004C 5010 DCE8             00CE8   103           ST    R1,AITAB          ITAB START LOCATION           00096001
000050 5A10 D0E8             000E8   104           A     R1,ITAB20S                                      00097001
000054 5010 DCD4             00CD4   105           ST    R1,ATABAD         ATAB START LOCATION           00098001
000058 1B22                          106           SR    R2,R2             ZERO REG FOR INIT VALUES      00099001
00005A 5020 DCB8             00CB8   107           ST    R2,KF0                                          00100001
00005E 5020 DCF4             00CF4   108           ST    R2,SAVEPB                                       00101001
000062 9104 D080       00080         109           TM    COMPFLGS,PROC     A PB0 ?                       00102001
000066 4710 B072             00072   110           BO    INITIAL           YES, BRANCH                   00103001
00006A 41F0 0001             00001   111           LA    R15,1             NO, PROGRAM BLK 1 IS FIRST BLOCK 00104001
00006E 50F0 DCF4             00CF4   112           ST    R15,SAVEPB                                      00105001
000072 5020 1000             00000   113 INITIAL   ST    R2,0(,R1)                                       00106001
000076 5020 DCBC             00CBC   114           ST    R2,SAVE           INITIALIZE WITH ZEROS         00107001
00007A D20F DCC0 DCBC 00CC0 00CBC    115           MVC   SAVE1(16),SAVE                                  00108001
000080 4220 DCFA             00CFA   116           STC   R2,BITS1          INITIALIZE SWITCHES           00109001
000084 41A0 D278             00278   117           LA    R10,PBTAB2                                      00110001
000088 50A0 DCD0             00CD0   118           ST    R10,APBTAB2       START ADDR OF PBTAB2          00111001
00008C 9180 D081       00081         119           TM    COMPFLGS+1,NSRCE  SOURCE SPECIFIED ?            00112001
000090 4710 B0C4             000C4   120           BO    INITIALA          NO                            00113001
000094 92FF D099       00099         121           MVI   LINCNT+1,255      FORCE HEADINGS TO BE PRINTED  00114001
000098 9240 D10D       0010D         122           MVI   PAGEHD1C+1,C' '   BLANK FIRST HEADING LINE      00115001
00009C D26C D10E D10D 0010E 0010D    123           MVC   PAGEHD1C+2(109),PAGEHD1C+1                      00116001
0000A2 D263 D190 D117 00190 00117    124           MVC   PAGEHD2D(L'PAGEHD2D),PAGEHD1D  BLANK 2ND HEADING LINE   00117001
0000A8 D263 D209 D117 00209 00117    125           MVC   PAGEHD3D(L'PAGEHD3D),PAGEHD1D  BLANK 3RD HEADING LINE   00118001
0000AE D20F D13E B702 0013E 00702    126           MVC   PAGEHD1D+39(L'HEAD1),HEAD1                      00119001
0000B4 D259 D190 B712 00190 00712    127           MVC   PAGEHD2D(L'HEAD2),HEAD2                         00120001
0000BA D259 D209 B76C 00209 0076C    128           MVC   PAGEHD3D(L'HEAD3),HEAD3                         00121001
0000C0 45C0 B622             00622   129           BAL   R12,PRINTITB      INITIALIZE PRINTING FOR ITAB  00122001
0000C4 1B11                          130 INITIALA  SR    R1,R1                                           00123001
0000C6 9102 D080       00080         131           TM    COMPFLGS,LNG      LONG OR SHORT PRECISION       00124001
0000CA 4710 B0D2             000D2   132           BO    READBLK           LONG, BRANCH                  00125001
0000CE 9204 B825       00825         133           MVI   FPLEN+1,4         SET SHORT FPLEN=4             00126001
                                     134 *                                                               00127001
                                     135 *         SCAN FOR DUPLICATES                                   00128001
                                     136 *                                                               00129001
                                     137 *         READS IN A NEW BLOCK                                  00130001
                                     138 *         START ADDR IN R8 END ADDR IN AITAB                    00131001
                                     139 *         COMPARES EACH IDENTIFIER WITH ALL IDENTIFIERS FOLLOWING 00132001
                                     140 *         IT IN THE BLOCK                                       00133001
                                     141 *         IF TWO EQUAL FOUND AND IF NOT FIRST ONE IS A FORMAL   00134001
                                     142 *         PARAMETER AND SECOND NOT E45 IS GENERATED             00135001
                                     143 *         WHEN ALL IDENTIFIERS IN THE BLOCK HAVE BEEN CHECK THE 00136001
                                     144 *         EXIT IS TO ALLOSTUR                                   00137001
                                     145 *                                                               00138001
0000D2 58C0 DCE8             00CE8   146 READBLK   L     R12,AITAB         START ADDR OF NEW BLOCK       00139001
0000D6 5820 D06C             0006C   147           L     R2,AUT3DCB        R2 -> SYSUT3 DCB              00140001
                                     148 *                                                               00141001
                                     149 *         READ IN NEW BLOCK                                     00142001
                                     150 *                                                               00143001
                                     151           READ  UT3DECB,SF,(R2),(R12),'S'                       00144001
0000DA 0700                          152+          CNOP  0,4                                             02-IHBRD
0000DC 4510 B0F4             000F4   153+          BAL   1,*+24                     LOAD DECB ADDRESS    02-IHBRD
0000E0 00000000                      154+UT3DECB   DC    F'0'                       EVENT CONTROL BLOCK  02-IHBRD
0000E4 80                            155+          DC    X'80'                      TYPE FIELD           02-IHBRD
0000E5 80                            156+          DC    X'80'                      TYPE FIELD           02-IHBRD
0000E6 0000                          157+          DC    AL2(0)                     LENGTH               02-IHBRD
0000E8 00000000                      158+          DC    A(0)                       DCB ADDRESS          02-IHBRD
0000EC 00000000                      159+          DC    A(0)                       AREA ADDRESS         02-IHBRD
0000F0 00000000                      160+          DC    A(0)                       RECORD POINTER WORD  02-IHBRD
0000F4 5021 0008             00008   161+          ST    2,8(1,0)                   STORE DCB ADDRESS    02-IHBRD
0000F8 50C1 000C             0000C   162+          ST    R12,12(1,0)                STORE AREA ADDRESS   02-IHBRD
0000FC 58F1 0008             00008   163+          L     15,8(1,0)              LOAD DCB ADDRESS         02-IHBRD
000100 58F0 F030             00030   164+          L     15,48(0,15)                LOAD RDWR ROUTINE ADDR 02-IHBRD
000104 05EF                          165+          BALR  14,15                      LINK TO RDWR ROUTINE 02-IHBRD
                                     166 *                                                               00145001
                                     167           CHECK UT3DECB                                         00146001
000106 4110 B0E0             000E0   168+          LA    1,UT3DECB                  LOAD PARAMETER REG 1 02-IHBIN
00010A 58E0 1008             00008   169+          L     14,8(0,1)           PICK UP DCB ADDR            01-CHECK
00010E 58F0 E034             00034   170+          L     15,52(0,14)         LOAD CHECK ROUTINE ADDR     01-CHECK
000112 05EF                          171+          BALR  14,15               LINK TO CHECK ROUTINE       01-CHECK
                                     172 *                                                               00147001
000114 1B22                          173           SR    R2,R2                                           00148001
000116 4320 C00A             0000A   174           IC    R2,10(,R12)       GET NEW PBN                   00149001
00011A 8B20 0002             00002   175           SLA   R2,2                                            00150001
00011E 5870 DCD4             00CD4   176           L     R7,ATABAD                                       00151001
000122 50C2 7000             00000   177           ST    R12,0(R2,R7)      SAVE ADDR OF BLOCK IN ATAB    00152001
000126 188C                          178           LR    R8,R12                                          00153001
000128 D201 DCF8 C000 00CF8 00000    179           MVC   LENCOUNT,0(R12)   GET LENTH OF BLOCK            00154001
00012E 4AC0 DCF8             00CF8   180           AH    R12,LENCOUNT                                    00155001
000132 50C0 DCE8             00CE8   181           ST    R12,AITAB         SAVE END ADDR OF BLOCK        00156001
000136 1878                          182           LR    R7,R8                                           00157001
000138 9180 8008       00008         183           TM    8(R8),X'80'       BLOCK TYPE PROC ?             00158001
00013C 4780 B148             00148   184           BZ    SCANNXT           NO                            00159001
000140 4170 8016             00016   185           LA    R7,22(,R8)        YES, SKIP CHECKING AGAINST    00160001
000144 47F0 B14C             0014C   186           B     SCANNXTA          TYPE PROCEDURE NAME           00161001
                                     187 *                                                               00162001
000148 4170 700B             0000B   188 SCANNXT   LA    R7,11(,R7)                                      00163001
00014C 5970 DCE8             00CE8   189 SCANNXTA  C     R7,AITAB          ALL IDENTIFIERS CHECKED ?     00164001
000150 4780 B19C             0019C   190           BE    ALLOSTOR          YES, GO TO ALLOCATE STORAGE   00165001
000154 952B 7005       00005         191           CLI   5(R7),X'2B'       FOR HEAD OR CONT ENTRY ?      00166001
000158 4780 B148             00148   192           BE    SCANNXT           YES, SKIP CHECKING            00167001
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  Active USINGs: WORKAREA,R13  IEX20000,R11

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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

00015C 9500 7000        00000         193          CLI   0(R7),0                  INVALID PROCEDURE NAME ?      00168001
000160 4780 B148              00148   194          BE    SCANNXT                  YES, SKIP CHECKING            00169001
000164 1897                           195          LR    R9,R7                                                  00170001
000166 4190 900B              0000B   196 CHECKNXT LA    R9,11(,R9)                                             00171001
00016A 5990 DCE8              00CE8   197          C     R9,AITAB                 ALL IDENT CHECKED AGAINST     00172001
00016E 4780 B148              00148   198          BE    SCANNXT                  THE ONE PROCESSED ?           00173001
000172 952B 9005        00005         199          CLI   5(R9),X'2B'              FOR HEAD OR CONT ENTRY ?      00174001
000176 4780 B166              00166   200          BE    CHECKNXT                                               00175001
00017A D505 9000 7000 00000 00000     201          CLC   0(6,R9),0(R7)            COMPARE EACH IDENTIFIER AGAINST 00176001
                                      202 *                                       ALL FOLLOWING INDENTIFIERS    00177001
                                      203 *                                       IN THE BLOCK                  00178001
000180 4770 B166              00166   204          BNE   CHECKNXT                                               00179001
000184 9130 7007        00007         205          TM    7(R7),X'30'              TWO EQUAL FOUND. PROCESSED    00180001
000188 4740 B190              00190   206          BM    CHECKNAA                 ONE FORMAL PARAMETER ?        00181001
00018C 47F0 B3DC              003DC   207          B     E43                      NO                            00182001
                                      208 *                                                                     00183001
000190 9130 9007        00007         209 CHECKNAA TM    7(R9),X'30'              COMPARED ONE IS FORMAL PARAM  00184001
000194 4740 B3DC              003DC   210          BM    E43                      YES                           00185001
000198 47F0 B166              00166   211          B     CHECKNXT                 NO                            00186001
                                      212 *                                                                     00187001
                                      213 *        ALLOSTOR                                                     00188001
                                      214 *                                                                     00189001
                                      215 *        ALLOCATES STORAGE FOR THE IDENTIFIERS                        00190001
                                      216 *        FOR A TYPE PROC BLOCK ALLOCATION STARTS AT 32 OTHERWISE      00191001
                                      217 *        AT 24.                                                       00192001
                                      218 *        NO BLOCK MAY GET MORE THAN 4K ALLOCATED.                     00193001
                                      219 *        IT IS ALSO CHECKED THAT THERE IS NO PROC, STRING OR          00194001
                                      220 *        SWITCH CALLED BY VALUE.                                      00195001
                                      221 *        WHEN ALL DECLARATIONS IN THE BLOCK ARE PROCESSED R3-FPLEN    00196001
                                      222 *        WILL BE PUT IN PBTAB2.                                       00197001
                                      223 *        IF THERE ARE MORE BLOCKS TO BE PROCESSED THE EXIT IS TO      00198001
                                      224 *        IDENTIFIER SCAN OTHERWISE TO WRITE ITAB.                     00199001
                                      225 *        FOUR POINTERS ARE USED -                                     00200001
                                      226 *        R3 DOUBLE WORD POINTER                                       00201001
                                      227 *        R4 WORD                                                      00202001
                                      228 *        R5 HALF WORD R6 BOOLEAN                                      00203001
                                      229 *        R3 IS INCREASED BY FPLEN WHICH IS 8 FOR LONG, 4 FOR SHORT.   00204001
                                      230 *        FOR LONG PRECISION ALL 4 POINTERS ARE USED                   00205001
                                      231 *        FOR SHORT R4 IS NEVER USED, WILL CONTAIN 0 ALL THE           00206001
                                      232 *        TIME                                                         00207001
                                      233 *        REAL WILL BE ALLOCATED TO R3, 4 OR 8 BYTES.                  00208001
                                      234 *        INTEGER WILL GET R3 OR R4. R3 ALWAYS IF SHORT R4 IF          00209001
                                      235 *        LONG AND R4 NOT ZERO.                                        00210001
                                      236 *        OTHERWISE R3, IN WHICH CASE R4 WILL EQUAL R3+4 FOR THE       00211001
                                      237 *        NEXT INTEGER.                                                00212001
                                      238 *        BOOLEAN WILL GET R3, R4, R5 OR R6 IF LONG R3, R5 OR R6       00213001
                                      239 *        IF SHORT.                                                    00214001
                                      240 *        FIRST BOOLEAN FOUND WILL GET EITHER R4 OR R3.                00215001
                                      241 *        R5 IS THEN INITILIZED TO R4+2 OR R3+2                        00216001
                                      242 *        R6                       R4+1     R3+1                       00217001
                                      243 *        SECOND BOOLEND WILL GET THE VALUE OF R6 AND R6 WILL BE 0.    00218001
                                      244 *        THIRD BOOLEAN WILL GET R5 AND R5 WILL BE 0 R6=R5+1.          00219001
                                      245 *        FORTH BOOLEAN WILL GET R6 AND R6 WILL BE 0.                  00220001
                                      246 *        THIS WILL THEN BE REPEATED FOR EVERY FOUR BOOLEAN            00221001
                                      247 *        IDENTIFIERS. ALL FORMAL PARAMETERS WILL GET THE R3 VALUE     00222001
                                      248 *        AND R3 WILL BE INCREASED BY 8.                               00223001
                                      249 *        ARRAYS WILL GET R3 VALUE AND R3 WILL BE INCREASED BY         00224001
                                      250 *        4(DIM+6)+X WHERE X IS 4 WHEN LONG PRECISION AND DIM IS       00225001
                                      251 *        AN UNEVEN NUMBER, OTHERWISE X IS 0.                          00226001
                                      252 *        LABEL, SWITCH , PROCEDURE WILL NOT GET ANYTHING              00227001
                                      253 *        EX. OF STORAGE ALLOCATION                                    00228001
                                      254 *        LONG           SHORT                                         00229001
                                      255 *        01234567       01234567  FP    FORMAL PARAMETER              00230001
                                      256 *        FP             FP        R     REAL                          00231001
                                      257 *        FP             FP        INT   INTEGER                       00232001
                                      258 *        R              R   INT   B     BOOLEAN                       00233001
                                      259 *        INT INT        INT INT   NU    NOT USED SPACE                00234001
                                      260 *        INT BBB        BBB R                                         00235001
                                      261 *        R              INT R                                         00236001
                                      262 *        INT NU                                                       00237001
                                      263 *        R                                                            00238001
                                      264 *                                                                     00239001
00019C 9180 8008        00008         265 ALLOSTOR TM    8(R8),X'80'              THE BLOCK A TYPE PROCEDURE ?  00240001
0001A0 4780 B1B0              001B0   266          BZ    ALLOSTAA                 NO                            00241001
0001A4 4130 0020              00020   267          LA    R3,32                    YES, SET DOUBLE WORD POINTER  00242001
0001A8 947F 8008        00008         268          NI    8(R8),X'7F'              CLEAR TYPE PROCEDURE INDICATION 00243001
0001AC 47F0 B1B4              001B4   269          B     STARTALL                                               00244001
                                      270 *                                                                     00245001
0001B0 4130 0018              00018   271 ALLOSTAA LA    R3,24                    SET DOUBLE WORD POINTER       00246001
0001B4 1B44                           272 STARTALL SR    R4,R4                    SET ALL POINTERS TO ZERO      00247001
0001B6 1B55                           273          SR    R5,R5                                                  00248001
0001B8 1B66                           274          SR    R6,R6                                                  00249001
0001BA 1878                           275          LR    R7,R8                    GET FIRST VARIABLE            00250001
0001BC 47F0 B1CC              001CC   276          B     GETNEXT                                                00251001
                                      277 *                                                                     00252001
0001C0 4A30 B824              00824   278 STORALLO AH    R3,FPLEN                 INCREASE ALLOCATION POINTER   00253001
0001C4 5930 B804              00804   279 STORALLA C     R3,KF4095                HAS 4K BEEN ALLOCATED ALREADY ? 00254001
0001C8 4720 B3F4              003F4   280          BH    E44                                                    00255001
0001CC 4170 700B              0000B   281 GETNEXT  LA    R7,11(,R7)               GET NEXT VARIABLE             00256001
0001D0 9036 DCD8              00CD8   282          STM   R3,R6,DPC                STORE ALL POINTERS            00257001
0001D4 5970 DCE8              00CE8   283          C     R7,AITAB                 ALL VARIABLES TAKEN CARE OF ? 00258001
0001D8 4780 B316              00316   284          BE    LASTREC                  YES                           00259001
0001DC 952B 7005        00005         285          CLI   5(R7),X'2B'              FOR HEADING OR CONTINUATION ? 00260001
0001E0 4780 B1CC              001CC   286          BE    GETNEXT                                                00261001
0001E4 9591 7006        00006         287          CLI   6(R7),X'91'              ALL PURPOSE IDENTIFIER ?      00262001
0001E8 4780 B1CC              001CC   288          BE    GETNEXT                                                00263001
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  Active USINGs: WORKAREA,R13  IEX20000,R11

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0001EC 9130 7007        00007         289            TM    7(R7),X'30'         FORMPARAM, DEK VAR OR CONST?    00264001
0001F0 4740 B2E0              002E0   290            BM    FORMPARM                                            00265001
0001F4 4780 B29C              0029C   291            BZ    CONST                                               00266001
0001F8 9103 7007        00007         292            TM    7(R7),X'03'         BOOLEAN VARIABLE ?              00267001
0001FC 4710 B23C              0023C   293            BO    BOOLEAN                                             00268001
000200 9102 D080        00080         294            TM    COMPFLGS,LNG        SHORT PRECISION ?               00269001
000204 4780 B210              00210   295            BZ    REAL                YES, ALLOCATE SAME FOR REAL AND 00270001
                                      296 *                                    INTEGER                         00271001
000208 9101 7007        00007         297            TM    7(R7),X'01'         INTEGER OR REAL ?               00272001
00020C 4710 B21A              0021A   298            BO    INTEGER                                             00273001
000210 D201 7009 DCDA 00009 00CDA     299 REAL       MVC   9(2,R7),DPC+2       MOVE IN DISPLACEMENT            00274001
000216 47F0 B1C0              001C0   300            B     STORALLO                                            00275001
                                      301 *                                                                    00276001
00021A 1244                           302 INTEGER    LTR   R4,R4               EMPTY HOLE LEFT FOR INTEGER ?   00277001
00021C 4780 B22E              0022E   303            BZ    INTEGERA            NO                              00278001
000220 D201 7009 DCDE 00009 00CDE     304            MVC   9(2,R7),WPC+2       YES, FILL THE HOLE AND MAKE     00279001
000226 4140 0000              00000   305            LA    R4,0                WORD POINTER= 0                 00280001
00022A 47F0 B1CC              001CC   306            B     GETNEXT                                             00281001
                                      307 *                                                                    00282001
00022E D201 7009 DCDA 00009 00CDA     308 INTEGERA   MVC   9(2,R7),DPC+2       MOVE IN DOUBLEWORD PTR AND MAKE 00283001
000234 4140 3004              00004   309            LA    R4,4(,R3)           WORDPTR POINT TD EMPTY HOLE NEXT 00284001
000238 47F0 B1C0              001C0   310            B     STORALLO            TO IT                           00285001
                                      311 *                                                                    00286001
00023C 1266                           312 BOOLEAN    LTR   R6,R6               SPACE LEFT NEXT TO PREV BOOL ?  00287001
00023E 4780 B24E              0024E   313            BZ    BOOLEANA            NO                              00288001
000242 D201 7009 DCE6 00009 00CE6     314            MVC   9(2,R7),BPC+2       YES, MOVE IN DISPLACEMENT       00289001
000248 1B66                           315            SR    R6,R6               MAKE BYTE POINTER 0             00290001
00024A 47F0 B1CC              001CC   316            B     GETNEXT                                             00291001
                                      317 *                                                                    00292001
00024E 1255                           318 BOOLEANA   LTR   R5,R5               SPACE LEFT NEXT TO 2 PREV BOOL ? 00293001
000250 4780 B264              00264   319            BZ    TESTWPA             NO                              00294001
000254 D201 7009 DCE2 00009 00CE2     320            MVC   9(2,R7),HPC+2       YES, MOVE IN DISPLACEMENT       00295001
00025A 4160 5001              00001   321            LA    R6,1(,R5)           MAKE BYTE POINTER POINT TO NEXT 00296001
00025E 1B55                           322            SR    R5,R5               HALFWORD POINTER 0              00297001
000260 47F0 B1CC              001CC   323            B     GETNEXT             FREE BYTE                       00298001
                                      324 *                                                                    00299001
000264 9102 D080        00080         325 TESTWPA    TM    COMPFLGS,LNG        SHORT PRECISION ?               00300001
000268 4780 B286              00286   326            BZ    TAKEDP              YES, DO NOT USE R4 POINTER      00301001
00026C 1244                           327 TESTWP     LTR   R4,R4               R4 POINTER FREE ?               00302001
00026E 4780 B286              00286   328            BZ    TAKEDP              NO, TAKE R3 POINTER INSTEAD     00303001
000272 D201 7009 DCDE 00009 00CDE     329            MVC   9(2,R7),WPC+2       YES, USE R4 AS DISPLACEMENT     00304001
000278 4160 4001              00001   330            LA    R6,1(,R4)           SET R5 AND R6                   00305001
00027C 4150 4002              00002   331            LA    R5,2(,R4)           TO FREE BYTES IN WORD           00306001
000280 1B44                           332            SR    R4,R4               SET R4 TO ZERO                  00307001
000282 47F0 B1CC              001CC   333            B     GETNEXT                                             00308001
                                      334 *                                                                    00309001
000286 D201 7009 DCDA 00009 00CDA     335 TAKEDP     MVC   9(2,R7),DPC+2       USE R3 AS DISPLACEMENT          00310001
00028C 4160 3001              00001   336            LA    R6,1(,R3)           SET R4, R5, R6 TO FREE BYTES    00311001
000290 4150 3002              00002   337            LA    R5,2(,R3)           WITHIN THE DOUBLE WORD          00312001
000294 4140 3004              00004   338            LA    R4,4(,R3)                                           00313001
000298 47F0 B1C0              001C0   339            B     STORALLO                                            00314001
                                      340 *                                                                    00315001
00029C 9104 7007        00007         341 CONST      TM    7(R7),X'04'         FOR LABEL, STRING, PROCEDURE    00316001
0002A0 4780 B1CC              001CC   342            BZ    GETNEXT                                             00317001
0002A4 9108 7007        00007         343            TM    7(R7),X'08'         DO NOT ALLOCATE ANY STORAGE     00318001
0002A8 4710 B1CC              001CC   344            BO    GETNEXT                                             00319001
0002AC 1BAA                           345            SR    R10,R10                                             00320001
0002AE 43A7 0009              00009   346            IC    R10,9(R7)                                           00321001
0002B2 8AA0 0004              00004   347            SRA   R10,4               FOR AN ARRAY                    00322001
0002B6 41A0 A006              00006   348            LA    R10,6(,R10)         STORAGE NEEDED IS 4(DIM+6)+X    00323001
0002BA 8BA0 0002              00002   349            SLA   R10,2                                               00324001
0002BE D601 7009 DCDA 00009 00CDA     350            OC    9(2,R7),DPC+2       OR IN THE DISP TO SAVE DIMENSION 00325001
0002C4 9102 D080        00080         351            TM    COMPFLGS,LNG        X IS 4 IF LONG PRECISION        00326001
0002C8 4780 B2D8              002D8   352            BZ    CONSTAA                                             00327001
0002CC 9110 7009        00009         353            TM    9(R7),X'10'         DIM IS AN UNEVEN NUMBER         00328001
0002D0 4780 B2D8              002D8   354            BZ    CONSTAA             INCREASE IF NEEDED TO GET       00329001
0002D4 41A0 A004              00004   355            LA    R10,4(,R10)         ON DOUBLE WORD BOUNDARY         00330001
0002D8 413A 3000              00000   356 CONSTAA    LA    R3,0(R10,R3)                                        00331001
0002DC 47F0 B1C4              001C4   357            B     STORALLA                                            00332001
                                      358 *                                                                    00333001
0002E0 9103 7007        00007         359 FORMPARM   TM    7(R7),X'03'         TYPE PARAMETER ?                00334001
0002E4 4780 B2F6              002F6   360            BZ    NOTTYPE             NO                              00335001
0002E8 D201 7009 DCDA 00009 00CDA     361 FORMPALL   MVC   9(2,R7),DPC+2       MOVE IN DISPLACEMENT            00336001
0002EE 4130 3008              00008   362            LA    R3,8(,R3)                                           00337001
0002F2 47F0 B1C4              001C4   363            B     STORALLA                                            00338001
                                      364 *                                                                    00339001
0002F6 9110 7007        00007         365 NOTTYPE    TM    7(R7),X'10'         CALL BY NAME ?                  00340001
0002FA 4710 B2E8              002E8   366            BO    FORMPALL            YES                             00341001
0002FE 9103 7007        00007         367            TM    7(R7),X'03'         NO, CHECK IF VALUE CALL CORRECT 00342001
000302 4780 B30A              0030A   368            BZ    NOTTYPEA                                            00343001
000306 47F0 B2E8              002E8   369            B     FORMPALL                                            00344001
                                      370 *                                                                    00345001
00030A 9528 7007        00007         371 NOTTYPEA   CLI   7(R7),X'28'         LABEL CALLED BY VALUE ?         00346001
00030E 4780 B2E8              002E8   372            BE    FORMPALL                                            00347001
000312 47F0 B3E8              003E8   373            B     E45                 PROC SWITCH OR STRING           00348001
                                      374 *                                    CALLED BY VALUE                 00349001
000316 1B22                           375 LASTREC    SR    R2,R2               CONSTRUCT ENTRY OF PBTAB2       00350001
000318 4320 800A              0000A   376            IC    R2,10(,R8)          GET PBN                         00351001
00031C 8B20 0001              00001   377            SLA   R2,1                                                00352001
000320 58E0 DCD0              00CD0   378            L     R14,APBTAB2                                         00353001
000324 41E2 E000              00000   379            LA    R14,0(R2,R14)                                       00354001
000328 4B30 B824              00824   380            SH    R3,FPLEN            GET LAST BYTE USED              00355001
00032C 4030 E000              00000   381            STH   R3,0(,R14)                                          00356001
000330 5810 DCF4              00CF4   382            L     R1,SAVEPB                                           00357001
000334 4910 D09E              0009E   383            CH    R1,PBN              ALL ITAB REC WRITTEN OUT ?      00358001
000338 4110 1001              00001   384            LA    R1,1(,R1)                                           00359001
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00033C 5010 DCF4            00CF4   385          ST    R1,SAVEPB                                        00360001
000340 4770 B0D2            000D2   386          BNE   READBLK                  NO                      00361001
                                    387 *                                                                00362001
                                    388 *        WRITITAB                                                00363001
                                    389 *                                                                00364001
                                    390 *        WRITES THE ITAB RECORD TO SYSUT3 IN PROGRAM BLOCK NUMBER 00365001
                                    391 *        ORDER                                                   00366001
                                    392 *        THE ADDR TO WHERE THE BLOCK IS GOING TO BE WRITTEN      00367001
                                    393 *        IS PICKED UP FROM ATAB                                  00368001
                                    394 *        IN EACH BLOCK THE LENGTH OF THE NEXT BLOCK IS INSERTED  00369001
                                    395 *                                                                00370001
000344 58C0 DCD4            00CD4   396 WRITITAB L     R12,ATABAD               START OF ADDR TABLE     00371001
000348 58A0 D06C            0006C   397          L     R10,AUT3DCB              R10 -> SYSUT3 DCB ADDR  00372001
                                    398 *                                                                00373001
                                    399          CLOSE ((R10),REREAD),TYPE=T    GET TO START OF SYSUT3   00374001
00034C                              400+         CNOP  0,4                                ALIGN LIST TO FULLWORD 01-CLOSE
00034C 4510 B354            00354   401+         BAL   1,*+8                              LOAD REG1 W/LIST ADDR  01-CLOSE
000350 00000000                     402+         DC    A(0)                               OPTION AND DCB ADDRESS 01-CLOSE
000354 50A1 0000            00000   403+         ST    R10,0(1,0)                         STORE DCB ADDRESS      01-CLOSE
000358 9290 1000      00000         404+         MVI   0(1),144                           MOVE IN OPTION BYTE    01-CLOSE
00035C 0A17                         405+         SVC   23                                 ISSUE TCLOSE SVC       01-CLOSE
                                    406 *                                                                00375001
00035E 1B22                         407          SR    R2,R2                                             00376001
000360 9104 D080      00080         408          TM    COMPFLGS,PROC            IS THERE A PB0 ?        00377001
000364 4780 B3C8            003C8   409          BZ    ITLP2                    NO                      00378001
000368 58A0 C000            00000   410 ITABLOOP L     R10,0(,R12)              GET ADDR OF BLOCK       00379001
00036C 5870 D06C            0006C   411          L     R7,AUT3DCB               DCB ADDR                00380001
000370 5850 C004            00004   412          L     R5,4(,R12)               GET ADDR OF NEXT BLOCK  00381001
000374 4920 D09E            0009E   413          CH    R2,PBN                   LAST BLOCK ?            00382001
000378 4780 B382            00382   414          BE    ITABLOOA                 YES                     00383001
00037C D201 A002 5000 00002 00000   415          MVC   2(2,R10),0(R5)           INSERT LENGTH OF NEXT BLOCK 00384001
000382 D201 DCF8 A000 00CF8 00000   416 ITABLOOA MVC   LENCOUNT,0(R10)          GET LENGTH OF CURRENT BLOCK 00385001
000388 48F0 DCF8            00CF8   417          LH    R15,LENCOUNT                                      00386001
                                    418 *                                                                00387001
                                    419          WRITE PRCH4,SF,(R7),(R10),(R15)                         00388001
00038C                              420+         CNOP  0,4                                               02-IHBRD
00038C 4510 B3A4            003A4   421+         BAL   1,*+24                    LOAD DECB ADDRESS       02-IHBRD
000390 00000000                     422+PRCH4    DC    F'0'                               EVENT CONTROL BLOCK    02-IHBRD
000394 00                           423+         DC    X'00'                              TYPE FIELD             02-IHBRD
000395 20                           424+         DC    X'20'                              TYPE FIELD             02-IHBRD
000396 0000                         425+         DC    AL2(0)                             LENGTH                 02-IHBRD
000398 00000000                     426+         DC    A(0)                               DCB ADDRESS            02-IHBRD
00039C 00000000                     427+         DC    A(0)                               AREA ADDRESS           02-IHBRD
0003A0 00000000                     428+         DC    A(0)                               RECORD POINTER WORD    02-IHBRD
0003A4 5071 0008            00008   429+         ST    R7,8(1,0)                          STORE DCB ADDRESS      02-IHBRD
0003A8 50A1 000C            0000C   430+         ST    R10,12(1,0)                        STORE AREA ADDRESS     02-IHBRD
0003AC 40F1 0006            00006   431+         STH   R15,6(1,0)            STORE LENGTH                        02-IHBRD
0003B0 58F1 0008            00008   432+         L     15,8(1,0)             LOAD DCB ADDRESS                    02-IHBRD
0003B4 58F0 F030            00030   433+         L     15,48(0,15)                        LOAD RDWR ROUTINE ADDR 02-IHBRD
0003B8 05EF                         434+         BALR  14,15                              LINK TO RDWR ROUTINE   02-IHBRD
                                    435 *                                                                00389001
                                    436          CHECK PRCH4                                             00390001
0003BA 4110 B390            00390   437+         LA    1,PRCH4                            LOAD PARAMETER REG 1   02-IHBIN
0003BE 58E0 1008            00008   438+         L     14,8(0,1)                 PICK UP DCB ADDR        01-CHECK
0003C2 58F0 E034            00034   439+         L     15,52(0,14)               LOAD CHECK ROUTINE ADDR 01-CHECK
0003C6 05EF                         440+         BALR  14,15                     LINK TO CHECK ROUTINE   01-CHECK
                                    441 *                                                                00391001
0003C8 41C0 C004            00004   442 ITLP2    LA    R12,4(,R12)              GET ADDR OF NEXT BLOCK  00392001
0003CC 4920 D09E            0009E   443          CH    R2,PBN                   ALL ITAB REC WRITTEN OUT ? 00393001
0003D0 4120 2001            00001   444          LA    R2,1(,R2)                                         00394001
0003D4 4770 B368            00368   445          BNE   ITABLOOP                 NO                      00395001
0003D8 47F0 B47A            0047A   446          B     ITABPRNT                 YES                     00396001
                                    447 *                                                                00397001
                                    448 *        E43                                                     00398001
                                    449 *                                                                00399001
                                    450 *        GENERATES ERROR MESSAGE 45                              00400001
                                    451 *        RETURNS TO SCANNING FOR DUPLICATES                      00401001
                                    452 *                                                                00402001
0003DC 45F0 B422            00422   453 E43      BAL   R15,ERRNAME                                       00403001
0003E0 922D A001      00001         454          MVI   1(R10),X'2D'             E45                     00404001
0003E4 47F0 B148            00148   455          B     SCANNXT                                           00405001
                                    456 *                                                                00406001
                                    457 *        E45                                                     00407001
                                    458 *                                                                00408001
                                    459 *        GENERATER ERROR MESSAGE 47                              00409001
                                    460 *        RETURNS TO FORMPALL AS IF VAR WAS CORRECT               00410001
                                    461 *                                                                00411001
0003E8 45F0 B422            00422   462 E45      BAL   R15,ERRNAME                                       00412001
0003EC 922F A001      00001         463          MVI   1(R10),X'2F'             E47                     00413001
0003F0 47F0 B2E8            002E8   464          B     FORMPALL                                          00414001
                                    465 *                                                                00415001
                                    466 *        E44                                                     00416001
                                    467 *                                                                00417001
                                    468 *        GENERATES ERROR MESSAGE 214                             00418001
                                    469 *        RETURNS TO LASTREC TO TAKE NEXT BLOCK, IF ANY           00419001
                                    470 *                                                                00420001
0003F4 5830 DCF4            00CF4   471 E44      L     R3,SAVEPB                                         00421001
0003F8 45C0 B612            00612   472          BAL   R12,CONVERT              CONVERT PBN             00422001
0003FC 58A0 D0C0            000C0   473          L     R10,NEXTERR                                       00423001
000400 41C0 A007            00007   474          LA    R12,7(,R10)              SPACE LEFT IN ERROR POOL ? 00424001
000404 59C0 D0C4            000C4   475          C     R12,ENDPOOL                                       00425001
000408 4720 B460            00460   476          BH    E0                                                00426001
00040C 50C0 D0C0            000C0   477          ST    R12,NEXTERR                                       00427001
000410 9287 A000      00000         478          MVI   0(R10),X'87'             MOVE LENGTH AND BLANK SC INDIC 00428001
000414 92D6 C001      00001         479          MVI   1(R12),X'D6'             E214                    00429001
000418 D202 A004 DCBD 00004 00CBD   480          MVC   4(3,R10),SAVE+1          PBN                     00430001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00041E 47F0 B316            00316   481          B     LASTREC                                                  00431001
                                    482 *                                                                       00432001
                                    483 *        ERRNAME                                                        00433001
                                    484 *                                                                       00434001
                                    485 *        FINDS THE LENGTH OF THE VARIABLE IN ERROR, CHECKS FOR          00435001
                                    486 *        ERRPOOL OVERFLOW, MOVES IN THE NAME OF THE VAR AND             00436001
                                    487 *        LENGTH OF MESSAGE                                              00437001
                                    488 *        RETURNS TO CALLING PROGRAM, E43 OR E44                         00438001
                                    489 *                                                                       00439001
000422 41C0 0005            00005   490 ERRNAME  LA    R12,5                                                    00440001
000426 42C0 B42D            0042D   491 ERRNAMEC STC   R12,ERRNAMEA+3          UPDATE NEXT INSTRUCTION          00441001
00042A 9500 7000      00000         492 ERRNAMEA CLI   0(R7),0                 FIND LENGTH OF NAME              00442001
00042E 4770 B436            00436   493          BNE   ERRNAMEB                                                 00443001
000432 46C0 B426            00426   494          BCT   R12,ERRNAMEC                                             00444001
000436 5890 D0C0            000C0   495 ERRNAMEB L     R9,NEXTERR                                               00445001
00043A 419C 9005            00005   496          LA    R9,5(R12,R9)                                             00446001
00043E 5990 D0C4            000C4   497          C     R9,ENDPOOL              CHECK SPACE IN ERRORPOOL         00447001
000442 4720 B460            00460   498          BH    E0                                                       00448001
000446 58A0 D0C0            000C0   499          L     R10,NEXTERR                                              00449001
00044A 5090 D0C0            000C0   500          ST    R9,NEXTERR                                               00450001
00044E 44C0 B474            00474   501          EX    R12,MOVE                INSERT NAME IN ERROR PATTERN     00451001
000452 41C0 C005            00005   502          LA    R12,5(,R12)                                              00452001
000456 42C0 A000            00000   503          STC   R12,0(,R10)                                              00453001
00045A 9680 A000      00000         504          OI    0(R10),X'80'            BLANK SC INDICATOR               00454001
00045E 07FF                         505          BR    R15                                                      00455001
                                    506 *                                                                       00456001
000460 41C0 D0C0            000C0   507 E0       LA    R12,NEXTERR                                              00457001
000464 9202 C000      00000         508          MVI   0(R12),X'02'                                             00458001
000468 92D4 C001      00001         509          MVI   1(R12),X'D4'            E212                             00459001
00046C 50C0 D0C0            000C0   510          ST    R12,NEXTERR                                              00460001
000470 47F0 B6D6            006D6   511          B     SLUT                                                     00461001
                                    512 *                                                                       00462001
000474 D200 A004 7000 00004 00000   513 MOVE     MVC   4(1,R10),0(R7)                                           00463001
                                    514 *                                                                       00464001
                                    515 *        ITABPRNT                                                       00465001
                                    516 *                                                                       00466001
                                    517 *        PRINTS ON SYSPRINT, IF SOURCE SPECIFIED, ALL VARIABLES         00467001
                                    518 *        THE BLOCKS IN PBN NUMBER ORDER AND WITH THE VAR SORTED         00468001
                                    519 *        WITHIN EACH BLOCK                                              00469001
                                    520 *        R5 KEEPS TRACK OF WHEN PRINTING IS NEEDED, THE                 00470001
                                    521 *        INFORMATION ABOUT EACH VAR IS BUILT UP IN WORK AND THEN        00471001
                                    522 *        TRANSFERRED TO PRINTAREA. WHEN 3 VAR HAVE BEEN PLACED IN       00472001
                                    523 *        THE PRINTAREA THE LINES IS PRINTED                             00473001
                                    524 *        THE ADDR TO THE BLOCK IS TAKEN FROM ATAB                       00474001
                                    525 *        THE LENGTH IS TAKEN FROM THE FIRST 2 BYTES IN THE BLOCK        00475001
                                    526 *        THE SURROUNDING PBN FROM PBTAB1                                00476001
                                    527 *        THE STARTING SC COUNTER FOR THE BLOCK FROM BYTE 6 AND 7        00477001
                                    528 *        IN THE BLOCK                                                   00478001
                                    529 *        IF THE BLOCK DOES NOT CONTAIN ANY VAR ONLY THE PBN AND         00479001
                                    530 *        SURROUNDING PBN ARE PRINTED                                    00480001
                                    531 *        ALL HEAD ENTRIES, FOR AND CONT LINES ARE SKIPPED               00481001
                                    532 *        EACH NEW BLOCK IS PRECEEDED BY A BLANK LINE                    00482001
                                    533 *        START ADDR OF THE BLOCK IS IN R8                               00483001
                                    534 *        END ADDR OF THE BLOCK IS IN AITAB, THIS ADDR WILL BE           00484001
                                    535 *        R8+11 WHEN ALL VAR PROCESSED                                   00485001
                                    536 *                                                                       00486001
00047A 9180 D081      00081         537 ITABPRNT TM    COMPFLGS+1,NSRCE        SOURCE SPECIFIED ?               00487001
00047E 4710 B6D6            006D6   538          BO    SLUT                    NO                               00488001
000482 1BEE                         539          SR    R14,R14                 CLEAR REG                        00489001
000484 9104 D080      00080         540          TM    COMPFLGS,PROC           THERE A PB0 ?                    00490001
000488 4710 B490            00490   541          BO    GETPBA                  YES, PROCESS PB0, R14=0          00491001
00048C 41E0 E001            00001   542 GETPB    LA    R14,1(,R14)             INCREASE PBN                     00492001
000490 18CE                         543 GETPBA   LR    R12,R14                                                  00493001
000492 8BC0 0002            00002   544          SLA   R12,2                                                    00494001
000496 5880 DCD4            00CD4   545          L     R8,ATABAD               GET ADDR OF NEW BLOCK            00495001
00049A 588C 8000            00000   546          L     R8,0(R12,R8)            VIA ATAB + 4 TIMES PBN           00496001
00049E D201 DCF8 8000 00CF8 00000   547          MVC   LENCOUNT,0(R8)          GET LENGTH OF THE BLOCK          00497001
0004A4 48C0 DCF8            00CF8   548          LH    R12,LENCOUNT                                             00498001
0004A8 41CC 8000            00000   549          LA    R12,0(R12,R8)           GET END OF BLOCK                 00499001
0004AC 50C0 DCE8            00CE8   550          ST    R12,AITAB               STORE END OF IT                  00500001
0004B0 45C0 B622            00622   551          BAL   R12,PRINTITB            PRINT A BLANK LINE               00501001
0004B4 183E                         552          LR    R3,R14                  CONVERT PBN                      00502001
0004B6 45C0 B612            00612   553          BAL   R12,CONVERT                                              00503001
0004BA D202 1000 DCBD 00000 00CBD   554          MVC   0(3,R1),SAVE+1          NEW PBN                          00504001
0004C0 433E D478            00478   555          IC    R3,PBTAB1(R14)          CONVERT SURROUNDING PBN          00505001
0004C4 45C0 B612            00612   556          BAL   R12,CONVERT                                              00506001
0004C8 D202 100A DCBD 0000A 00CBD   557          MVC   10(3,R1),SAVE+1         SURROUNDING PBN                  00507001
0004CE D201 B7C6 8006 007C6 00006   558          MVC   SCSAVE(2),6(R8)         CONVERT SC COUNTER TO DECIMAL    00508001
0004D4 48C0 B7C6            007C6   559          LH    R12,SCSAVE                                               00509001
0004D8 4EC0 B7D8            007D8   560          CVD   R12,DOUBLE              STARTING SC OF BLOCK IS INSERTED 00510001
0004DC F347 1004 B7D8 00004 007D8   561          UNPK  4(5,R1),DOUBLE                                           00511001
0004E2 96F0 1008      00008         562          OI    8(R1),X'F0'                                              00512001
0004E6 D501 DCF8 B896 00CF8 00896   563          CLC   LENCOUNT,KA11           EMPTY BLOCK ?                    00513001
0004EC 4770 B4F8            004F8   564          BNE   ITABPRNX                NO                               00514001
0004F0 45C0 B622            00622   565          BAL   R12,PRINTITB            FOR AN EMPTY BLOCK PRINT         00515001
0004F4 47F0 B6BE            006BE   566          B     ENDBLOCK                ONLY THE BLOCK NUMBERS           00516001
                                    567 *                                                                       00517001
0004F8 1B55                         568 ITABPRNX SR    R5,R5                                                    00518001
                                    569 *                                                                       00519001
                                    570 *        GETNVAR                                                        00520001
                                    571 *                                                                       00521001
                                    572 *        LOOPS THROUGH BLOCK TO GET THE CURRENT LOWEST VARIABLE         00522001
                                    573 *        EXITS TO ENDBLOCK WHEN ALL VAR IN THE BLOCK HAVE BEEN          00523001
                                    574 *        PROCESSED, OTHERWISE TO TESTVAR                                00524001
                                    575 *                                                                       00525001
0004FA 4170 800B            0000B   576 GETNVAR  LA    R7,11(,R8)              GET FIRST VAR AFTER HEADING      00526001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0004FE 18A7                        577          LR    R10,R7                                              00527001
000500 5970 DCE8            00CE8  578          C     R7,AITAB              ALL VAR PROCESSED ?           00528001
000504 4780 B6BE            006BE  579          BE    ENDBLOCK              YES                           00529001
000508 952B 7005      00005        580          CLI   5(R7),X'2B'           HEAD OR CONTINUATION LINE ?   00530001
00050C 4780 B67A            0067A  581          BE    ENDVAR2                                             00531001
000510 41A0 A00B            0000B  582 TESTNXT  LA    R10,11(,R10)          GET NEXT VAR                  00532001
000514 59A0 DCE8            00CE8  583          C     R10,AITAB             ALL VAR COMPARED ?            00533001
000518 4780 B534            00534  584          BE    TESTVAR                                             00534001
00051C 952B A005      00005        585          CLI   5(R10),X'2B'          HEAD OR CONTINUATION LINE ?   00535001
000520 4780 B510            00510  586          BE    TESTNXT               YES, SKIP THAT LINE           00536001
000524 D505 7000 A000 00000 00000  587          CLC   0(6,R7),0(R10)        COMPARE CURRENT LOWEST - NEW ? 00537001
00052A 4740 B510            00510  588          BL    TESTNXT               CURRENT LOWEST STILL LOW      00538001
00052E 187A                        589          LR    R7,R10                NO, SHIFT R7 TO NEW           00539001
000530 47F0 B510            00510  590          B     TESTNXT                                             00540001
                                   591 *                                                              00541001
                                   592 *        TESTVAR                                               00542001
                                   593 *                                                              00543001
                                   594 *        CHECKS THE INTERNAL NAME TO FIND TYPE AND MOVES       00544001
                                   595 *        CHARACTERISTICS TO WORKAREA                           00545001
                                   596 *                                                              00546001
000534 9191 7006      00006        597 TESTVAR  TM    6(R7),X'91'           ALL PURPOSE IDENTIFIER ?      00547001
000538 4710 B638            00638  598          BO    ENDVAR                YES                           00548001
00053C 9103 7007      00007        599          TM    7(R7),X'03'           TYPE ?                        00549001
000540 4710 B560            00560  600          BO    BOL                   TYPE=BOOLEAN                  00550001
000544 4780 B564            00564  601          BZ    BOLA                  NOT TYPE                      00551001
000548 9101 7007      00007        602          TM    7(R7),X'01'           INTEGER OR REAL ?             00552001
00054C 4780 B558            00558  603          BZ    TESTVARA                                            00553001
000550 92C9 B7ED      007ED        604          MVI   WORK+7,C'I'           INTEGER                       00554001
000554 47F0 B564            00564  605          B     BOLA                                                00555001
                                   606 *                                                              00556001
000558 92D9 B7ED      007ED        607 TESTVARA MVI   WORK+7,C'R'           REAL                          00557001
00055C 47F0 B564            00564  608          B     BOLA                                                00558001
                                   609 *                                                              00559001
000560 92C2 B7ED      007ED        610 BOL      MVI   WORK+7,C'B'           BOOLEAN                       00560001
000564 910C 7007      00007        611 BOLA     TM    7(R7),X'0C'                                         00561001
000568 4780 B57C            0057C  612          BZ    TESTPROC                                            00562001
00056C 4710 B5CC            005CC  613          BO    SWITCH                                              00563001
000570 9108 7007      00007        614          TM    7(R7),X'08'           ARRAY OR LABEL ?              00564001
000574 4780 B5E0            005E0  615          BZ    ARRAY                                               00565001
000578 92D3 B7EE      007EE        616          MVI   WORK+8,C'L'           LABEL                         00566001
00057C 91C0 7007      00007        617 TESTPROC TM    7(R7),X'C0'                                         00567001
000580 4710 B5D4            005D4  618          BO    PROCEDUR                                            00568001
000584 4780 B598            00598  619          BZ    FORMAL                                              00569001
000588 9140 7007      00007        620          TM    7(R7),X'40'                                         00570001
00058C 4780 B598            00598  621          BZ    FORMAL                                              00571001
000590 92C3 B7F1      007F1        622          MVI   WORK+11,C'C'          CODE PROCEDURE                00572001
000594 47F0 B5D4            005D4  623          B     PROCEDUR                                            00573001
                                   624 *                                                              00574001
000598 9130 7007      00007        625 FORMAL   TM    7(R7),X'30'           SPECIFIED IDENTIFIER ?        00575001
00059C 4710 B638            00638  626          BO    ENDVAR                                              00576001
0005A0 4780 B638            00638  627          BZ    ENDVAR                                              00577001
0005A4 94FD DCFA      00CFA        628 FORMALC  NI    BITS1,PROCOFF         RESET PROCEDURE BIT           00578001
0005A8 9101 7006      00006        629          TM    6(R7),X'01'                                         00579001
0005AC 4780 B5B4            005B4  630          BZ    FORMALA                                             00580001
0005B0 92E3 B7EE      007EE        631          MVI   WORK+8,C'T'           STRING                        00581001
0005B4 9110 7007      00007        632 FORMALA  TM    7(R7),X'10'           NAME OR VALUE CALL ?          00582001
0005B8 4780 B5C4            005C4  633          BZ    FORMALB                                             00583001
0005BC 92D5 B7F0      007F0        634          MVI   WORK+10,C'N'          NAME                          00584001
0005C0 47F0 B638            00638  635          B     ENDVAR                                              00585001
                                   636 *                                                              00586001
0005C4 92E5 B7F0      007F0        637 FORMALB  MVI   WORK+10,C'V'          VALUE                         00587001
0005C8 47F0 B638            00638  638          B     ENDVAR                                              00588001
                                   639 *                                                              00589001
0005CC 92E2 B7EE      007EE        640 SWITCH   MVI   WORK+8,C'S'           SWITCH                        00590001
0005D0 47F0 B5E4            005E4  641          B     CONVERT2              CONVERT NUMBER OF COMPONENTS  00591001
                                   642 *                                                              00592001
0005D4 92D7 B7EF      007EF        643 PROCEDUR MVI   WORK+9,C'P'           PROCEDURE                     00593001
0005D8 9602 DCFA      00CFA        644          OI    BITS1,PROCBIT         SET PROCEDURE BIT             00594001
0005DC 47F0 B5E4            005E4  645          B     CONVERT2              CONVERT NUM OF PARAMETERS     00595001
                                   646 *                                                              00596001
0005E0 92C1 B7EF      007EF        647 ARRAY    MVI   WORK+9,C'A'           ARRAY                         00597001
                                   648 *                                                              00598001
                                   649 *        CONVERT2                                              00599001
                                   650 *                                                              00600001
                                   651 *        ENTERED FOR PROCEDURE, ARRAY AND SWITCH CONVERTS THE  00601001
                                   652 *        NUMBER OF PARAMETERS, DIMENSIONS OR COMPONENTS TO     00602001
                                   653 *        DECIMAL FORM AND PUTS IT IN WORK                      00603001
                                   654 *        FOR ARRAY OR SWITCH THE COUNTER IS FIRST INCREASED BY 00604001
                                   655 *        ONE TO GET THE REAL VALUE.                            00605001
                                   656 *                                                              00606001
0005E4 9130 7007      00007        657 CONVERT2 TM    7(R7),X'30'                                         00607001
0005E8 4740 B5A4            005A4  658          BM    FORMALC                                             00608001
0005EC 4330 7009            00009  659          IC    R3,9(,R7)                                           00609001
0005F0 8A30 0004            00004  660          SRA   R3,4                  SWITCH OR PROCEDURE           00610001
0005F4 9102 DCFA      00CFA        661          TM    BITS1,PROCBIT         TEST IF PROC PARAMETERS       00611001
0005F8 4710 B600            00600  662          BO    *+8                   YES                           00612001
0005FC 4130 3001            00001  663          LA    R3,1(,R3)             NO, INCREASE DIM COUNTER      00613001
000600 94FD DCFA      00CFA        664          NI    BITS1,PROCOFF         TO GIVE CORRECT VALUE         00614001
000604 45C0 B612            00612  665          BAL   R12,CONVERT           CONVERT IT TO DECIMAL         00615001
000608 D201 B7F3 DCBE 007F3 00CBE  666          MVC   WORK+13(2),SAVE+2     AND MOVE IT OUT               00616001
00060E 47F0 B598            00598  667          B     FORMAL                                              00617001
                                   668 *                                                              00618001
                                   669 *        CONVERT                                               00619001
                                   670 *                                                              00620001
                                   671 *        CONVERTS FROM HEXADECIMAL TO DECIMAL                  00621001
                                   672 *        USED FOR LN, DISP AND PBN TO BE WRITEN OUT            00622001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    673 *                                                                      00623001
000612 4E30 B7D8            007D8   674 CONVERT  CVD   R3,DOUBLE              CONVERT TO DECIMAL               00624001
000616 F332 DCBC B7DD 00CBC 007DD   675          UNPK  SAVE(4),DOUBLE+5(3)    UNPACK                           00625001
00061C 96F0 DCBF      00CBF         676          OI    SAVE+3,X'F0'           MAKE PRINTABLE                   00626001
000620 07FC                         677          BR    R12                    RETURN                           00627001
                                    678 *                                                                      00628001
                                    679 *        PRINTITB                                                      00629001
                                    680 *        PRINTS A LINE, SAVES NEW PRINTAREA ADDR, RESETS R5            00630001
                                    681 *                                                                      00631001
000622 90EF DCC0            00CC0   682 PRINTITB STM   R14,R15,SAVE1                                           00632001
000626 58F0 D0B8            000B8   683          L     R15,PRTRTADD           PRINT A RECORD                   00633001
00062A 05EF                         684          BALR  R14,R15                                                 00634001
00062C 5010 DCEC            00CEC   685          ST    R1,APRNTAR             SAVE ADDR OF NEXT PRINT AREA     00635001
000630 98EF DCC0            00CC0   686          LM    R14,R15,SAVE1                                           00636001
000634 1B55                         687          SR    R5,R5                  RESET R5                         00637001
000636 07FC                         688          BR    R12                    RETURN                           00638001
                                    689 *                                                                      00639001
                                    690 *        ENDVAR                                                        00640001
                                    691 *                                                                      00641001
                                    692 *        MOVES EXTERNAL NAME TO WORK, TRANSLATES IT                    00642001
                                    693 *        CONVERTS LN OR DISP AND MOVES THAT TO WORK                    00643001
                                    694 *        MOVES WORK TO CURRENT PRINTAREA WITH AN EXECUTE MVC           00644001
                                    695 *        INCREASES R5 AND CHECKS IF ONE LINE HAS BEEN FILLED UP        00645001
                                    696 *        IN THAT CASE - PRINTS THAT LINE                               00646001
                                    697 *        SHIFTS AWAY THE NOW PROCESSED VAR AND STORES THE NEW           00647001
                                    698 *        ENDING ADDR OF THE BLOCK IN AITAB                             00648001
                                    699 *        RETURNS TO PROCESS NEXT VAR                                   00649001
                                    700 *                                                                      00650001
000638 D205 B7E6 7000 007E6 00000   701 ENDVAR   MVC   WORK(6),0(R7)          MOVE EXTERNAL NAME               00651001
00063E DC05 B7E6 B826 007E6 00826   702          TR    WORK(6),TRINTEXT                                        00652001
000644 D201 B7CC 7009 007CC 00009   703          MVC   SAVE2(2),9(R7)         MOVE                             00653001
00064A F342 B7CF B7CC 007CF 007CC   704          UNPK  SAVE3,SAVE2            CONVERT DISP OR LABEL NUMBER     00654001
000650 DC02 B7D0 B796 007D0 00796   705          TR    SAVE3+1(3),TAB-240     TO BE WRITTEN OUT                00655001
000656 D202 B7F6 B7D0 007F6 007D0   706          MVC   WORK+16(3),SAVE3+1                                      00656001
00065C 4405 B808            00808   707          EX    R0,MOVEVAR(R5)         MOVE OUT WORK TO PRINT AREA      00657001
000660 9240 B7E6      007E6         708          MVI   WORK,C' '              CLEAR WORK                       00658001
000664 D21C B7E7 B7E6 007E7 007E6   709          MVC   WORK+1(L'WORK-1),WORK                                   00659001
00066A 4150 5008            00008   710          LA    R5,8(,R5)                                               00660001
00066E 5950 B820            00820   711          C     R5,KF24                TIME TO PRINT ?                  00661001
000672 4770 B67A            0067A   712          BNE   ENDVAR2                NO                               00662001
000676 45C0 B622            00622   713          BAL   R12,PRINTITB           YES, CALL FOR PRINT ROUTINE      00663001
00067A 58A0 DCE8            00CE8   714 ENDVAR2  L     R10,AITAB                                               00664001
00067E 41C0 700C            0000C   715          LA    R12,12(,R7)            LEN TO MOVE ITAB UP TO           00665001
000682 59C0 DCE8            00CE8   716          C     R12,AITAB              NOTHING TO MOVE ?                00666001
000686 47D0 B692            00692   717          BNH   ENDVAR3                                                 00667001
00068A 5070 DCE8            00CE8   718          ST    R7,AITAB               STORE ADDR OF CURRENT AS ENDADDR 00668001
00068E 47F0 B4FA            004FA   719          B     GETNVAR                                                 00669001
                                    720 *                                                                      00670001
000692 1BAC                         721 ENDVAR3  SR    R10,R12                CALCULATE NEW END ADDR OF THE    00671001
000694 41CA 7001            00001   722          LA    R12,1(R10,R7)          BLOCK AND STORE IT IN AITAB      00672001
000698 50C0 DCE8            00CE8   723          ST    R12,AITAB                                               00673001
00069C 59A0 B7C8            007C8   724 COMPARE  C     R10,KF256                                               00674001
0006A0 47D0 B6B6            006B6   725          BNH   EX1                                                     00675001
0006A4 D2FF 7000 700B 00000 0000B   726          MVC   0(256,R7),11(R7)       TRANSFER A 256 BYTE SECTION      00676001
0006AA 4170 7100            00100   727          LA    R7,256(,R7)            OF THE BLOCK AT THE TIME         00677001
0006AE 5BA0 B7C8            007C8   728          S     R10,KF256                                               00678001
0006B2 47F0 B69C            0069C   729          B     COMPARE                                                 00679001
                                    730 *                                                                      00680001
0006B6 44A0 B7E0            007E0   731 EX1      EX    R10,MOVEITAB           MOVE LAST PARTIAL SECTION        00681001
0006BA 47F0 B4FA            004FA   732          B     GETNVAR                                                 00682001
                                    733 *                                                                      00683001
                                    734 *        ENDBLOCK                                                      00684001
                                    735 *                                                                      00685001
                                    736 *        PRINTS LAST LINE OF BLOCK, IF NEEDED                          00686001
                                    737 *        EXITS TO GETPB IF ANY BLOCK LEFT TO BE PROCESSED              00687001
                                    738 *        OTHERWISE A FREEMAIN IS DONE AND LINK TO IEX21                00688001
                                    739 *                                                                      00689001
0006BE 5950 DCB8            00CB8   740 ENDBLOCK C     R5,KF0                 VAR LEFT TO BE WRITTEN OUT ?     00690001
0006C2 4780 B6CA            006CA   741          BE    *+8                                                     00691001
0006C6 45C0 B622            00622   742          BAL   R12,PRINTITB                                            00692001
0006CA 41C0 E001            00001   743          LA    R12,1(,R14)                                             00693001
0006CE 49C0 D09E            0009E   744          CH    R12,PBN                ALL BLOCKS PROCESSED ?           00694001
0006D2 47D0 B48C            0048C   745          BNH   GETPB                  NO, TAKE NEXT                    00695001
0006D6 5810 D0E8            000E8   746 SLUT     L     R1,ITAB20S             ITAB AREA                        00696001
0006DA 4110 1400            00400   747          LA    R1,1024(0,R1)          AND ATAB AREA ARE MADE           00697001
0006DE 1801                         748          LR    R0,R1                  FREEMAIN FOR                     00698001
0006E0 5810 DCF0            00CF0   749          L     R1,AREALOC                                              00699001
                                    750 *                                                                      00700001
                                    751          FREEMAIN R,LV=(0),A=(1)                                       00701001
                                    752+*        OS/VS2 RELEASE 3 VERSION  -- 10/25/74                         01-FREEM
0006E4 4110 1000            00000   753+         LA    1,0(0,1)                         CLEAR HI ORDER BYTE    01-FREEM
0006E8 0A0A                         754+         SVC   10                               ISSUE FREEMAIN SVC     01-FREEM
                                    755 *                                                                      00702001
                                    756 SLUT2    XCTL  EP=IEX21000                                             00703001
0006EA                              757+SLUT2    DS    0H                                                      01-XCTL
0006EA 0700                         758+         CNOP  0,4                                                     02-IHBIN
0006EC 45F0 B700            00700   759+         BAL   15,*+20             BRANCH AROUND CONSTANTS             02-IHBIN
0006F0 000006F8                     760+         DC    A(*+8)              ADDR. OF PARM. LIST                 02-IHBIN
0006F4 00000000                     761+         DC    A(0)                 DCB ADDRESS PARAMETER              02-IHBIN
0006F8 C9C5E7F2F1F0F0F0             762+         DC    CL8'IEX21000'        EP PARAMETER                       02-IHBIN
000700 0A07                         763+         SVC   7                                ISSUE XCTL SVC         01-XCTL
                                    764 *                                                                      00704001
                                    765 *        HEADING LINES                                                 00705001
                                    766 *                                                                      00706001
000702 C9C4C5D5E3C9C6C9             767 HEAD1    DC    C'IDENTIFIER TABLE'                                     00707001
                                    768 *                                                                      00708001
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  Active USINGs: WORKAREA,R13  IEX20000,R11

  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000712 D7C2D540E2C34040              769 HEAD2    DC    C'PBN SC    PBN      NAME   TYPE  DM DSP        NAME   TYX00709001
                                                        PE  DM DSP       NAME   TYPE  DM DSP'                     00710001
                                     770 *                                                                        00711001
00076C 4040404040404040              771 HEAD3    DC    C'         SURR                  PR LN                   X00712001
                                                            PR LN                     PR LN '                     00713001
                                     772 *                                                                        00714001
0007C6 0000                          773 SCSAVE   DC    H'0'                    SAVE SEMICOLON COUNTER            00715001
0007C8 00000100                      774 KF256    DC    F'256'                  USED BY MOVE LOOP                 00716001
0007CC F0F0F0                        775 SAVE2    DC    C'000'                  USED FOR CONVERSION               00717001
0007CF 0000000000                    776 SAVE3    DC    XL5'00'                                                   00718001
0007D4 00000000
0007D8 0000000000000000              777 DOUBLE   DC    D'0'                                                      00719001
0007E0 D200 7000 700B 00000 0000B    778 MOVEITAB MVC   0(1,R7),11(R7)          USED BY ENDVAR                    00720001
0007E6 4040404040404040              779 WORK     DC    CL30' '                 USED TO BUILD PRINT RECORD        00721001
000804 00000FFF                      780 KF4095   DC    F'4095'                 STORAGE ALLOCATION MAXIMUM        00722001
                                     781 *                                                                        00723001
000808 D21A 1013 B7E6 00013 007E6    782 MOVEVAR  MVC   19(27,R1),WORK          USED TO SORT REC TO BE PRINTED    00724001
00080E 0700                          783          CNOP  0,4                                                       00725001
000810 D21A 102D B7E6 0002D 007E6    784          MVC   45(27,R1),WORK                                            00726001
000816 0700                          785          CNOP  0,4                                                       00727001
000818 D212 1047 B7E6 00047 007E6    786          MVC   71(19,R1),WORK                                            00728001
                                     787 *                                                                        00729001
00081E 0000
000820 00000018                      788 KF24     DC    F'24'                   USED BY ENDVAR                    00730001
000824 0008                          789 FPLEN    DC    H'8'                    4 = SHORT PREC, 8 = LONG PREC     00731001
                                     790 *                                      INCREASE VALUE DURING             00732001
                                     791 *                                      STORAGE ALLOCATION                00733001
                                     792 *                                                                        00734001
                                     793 *        TRANSLATE FOR INTERNAL TO EBCDIC CODE                           00735001
                                     794 *                                                                        00736001
000826                               795 TRINTEXT DS    0CL96                                                     00737001
000826 40                            796          DC    C' '                                                      00738001
000827 5D5D5D5D5D5D5D5D              797          DC    47C')'                                                    00739001
000856 F0F1F2F3F4F5F6F7              798          DC    C'0123456789'                                             00740001
000860 5D5D5D5D5D5D                  799          DC    6C')'                                                     00741001
000866 C1C2C3C4C5C6C7C8              800          DC    C'ABCDEFGHIJKLMNOPQRSTUVWXYZ$_#@))'                       00742001
                                     801 *                                                                        00743001
                                     802 *        FOR PRINTABLE HEXADECIMAL                                       00744001
                                     803 *                                                                        00745001
000886 F0F1F2F3F4F5F6F7              804 TAB      DC    C'0123456789ABCDEF'                                       00746001
000896 000B                          805 KA11     DC    AL2(11)                                                   00747001
                                     806 *                                                                        00748001
000898                               807          LTORG                                                           00749001
                                     808 *                                                                        00750001
000000                00000 00CFB    809 WORKAREA DSECT                                                           00751001
                                     810          COPY  WORKAREA                                                  00752001
                                     811=*                                                                        00001001
                                     812=*        WORKAREA - MAPPING CSECT IEX00001                               00002001
                                     813=*                                                                        00003001
                                     814=*        ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT    00004001
                                     815=*                                                                        00005001
000000 0000000000000000              816=SAVEAREA DC    18F'0'                                                    00006001
                                     817=*                                                                        00007001
                                     818=*        DCB ADDRS                                                       00008001
                                     819=*                                                                        00009001
000048                               820=DCBTABLE DC    0F'0'                                                     00010001
000048 00000000                      821=ALINDCB  DC    A(0)                                                      00011001
00004C 00000000                      822=         DC    A(0)                                                      00012001
000050 00000000                      823=         DC    A(0)                                                      00013001
000054 00000000                      824=         DC    A(0)                                                      00014001
000058 00000000                      825=ASYSDCB  DC    A(0)                                                      00015001
00005C 00000000                      826=APRTDCB  DC    A(0)                                                      00016001
000060 00000000                      827=APCHDCB  DC    A(0)                                                      00017001
000064 00000000                      828=AUT1DCB  DC    A(0)                                                      00018001
000068 00000000                      829=AUT2DCB  DC    A(0)                                                      00019001
00006C 00000000                      830=AUT3DCB  DC    A(0)                                                      00020001
                                     831=*                                                                        00021001
                                     832=*        END OF DATA EXIT ADDRS                                          00022001
                                     833=*                                                                        00023001
000070 00000000                      834=EODUT1   DC    A(0)                    SYSUT1                            00024001
000074 00000000                      835=EODUT2   DC    A(0)                    SYSUT2                            00025001
000078 00000000                      836=EODUT3   DC    A(0)                    SYSUT3                            00026001
00007C 00000000                      837=EODIN    DC    A(0)                    SYSIN                             00027001
                                     838=*                                                                        00028001
                                     839=*        OPTION SWITCHES IN COMPFLGS                                     00029001
                                     840=*                                                                        00030001
                                     841=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -                   00031001
                                     842=*                                                                        00032001
                                     843=*        PURPOSE                   POSITION                              00033001
                                     844=*                                  BYTE 1    BYTE 2    BYTE 3            00034001
                                     845=*                                  01234567  01234567  01234567          00035001
                                     846=*                                                                        00036001
                                     847=*        COMPMODE (SYNTAX CHECK)   X                                     00037001
                                     848=*        SUBSCRIPT OPTIMIZATION     X                                    00038001
                                     849=*        WARNING ERROR               X                                   00039001
                                     850=*        SERIOUS ERROR                X                                  00040001
                                     851=*        TERMINATING ERROR             X                                 00041001
                                     852=*        PROCEDURE/PROGRAM              X                                00042001
                                     853=*        LONG/SHORT PRECISION            X                               00043001
                                     854=*        OPERAND                          X                              00044001
                                     855=*                                                                        00045001
                                     856=*        NOSOURCE/SOURCE                     X                           00046001
                                     857=*        NOLOAD/LOAD                          X                          00047001
                                     858=*        NODECK/DECK                           X                         00048001
                                     859=*        ISO/EBCDIC                             X                        00049001
                                     860=*        PROGRAM INTERRUPT                       X                       00050001
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    861=*        TERMINATING PHASE ENTERED                X          00051001
                                    862=*        NO BUFFERS ASSIGNED                       X         00052001
                                    863=*        NO COMPILATION POSSIBLE                    X        00053001
                                    864=*                                                            00054001
                                    865=*        SYSPRINT DOWN                                   X   00055001
                                    866=*        WHOLE SOURCE PROG IN CORE                        X  00056001
                                    867=*        NO OPTAB                                          X 00057001
                                    868=*        SYSPRINT NOT OPENED                                X00058001
                                    869=*        ERROR UNRELATED TO SEMICOLON NR                     X00059001
                                    870=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)      X00060001
                                    871=*        60 CHARACTER SET                                     X00061001
                                    872=*        (RESERVED)                                            X00062001
                                    873=*                                                            00063001
000080 00220000                     874=COMPFLGS DC    X'00220000'            PARAMETERS AND SWITCHES 00064001
                                    875=*                                                            00065001
                                    876=*        OPTION SWITCHES IN COMPFLGS                         00066001
                                    877=*                                                            00067001
                     00080          878=COMPMODE EQU   X'80'                  SYNTAX CHECK MODE       00068001
                     00040          879=SUBSCOPT EQU   X'40'                  SUBSCRIPT OPTIMIZATION  00069001
                     000FB          880=PGR      EQU   X'FB'                                          00070001
                     00004          881=PROC     EQU   X'04'                  PRECOMPILED PROCEDURE   00071001
                                    882=*                                                            00072001
                     000FD          883=SHRT     EQU   X'FD'                                          00073001
                     00002          884=LNG      EQU   X'02'                                          00074001
                     00001          885=OPERAND  EQU   X'01'                                          00075001
                                    886=*                                                            00076001
                                    887=*        ERROR SEVERITY INDICATORS IN COMPFLGS               00077001
                                    888=*                                                            00078001
                     00020          889=WERR     EQU   X'20'                  WARNING ERROR           00079001
                     00010          890=SERR     EQU   X'10'                  SERIOUS ERROR           00080001
                     00008          891=TERR     EQU   X'08'                  TERMINATING ERROR       00081001
                                    892=*                                                            00082001
                                    893=*        OPTION SWITCHES IN COMPFLGS+1                       00083001
                                    894=*                                                            00084001
                     0007F          895=SRCE     EQU   X'7F'                                          00085001
                     00080          896=NSRCE    EQU   X'80'                                          00086001
                                    897=*                                                            00087001
                     000BF          898=LOAD     EQU   X'BF'                                          00088001
                     00040          899=NLOAD    EQU   X'40'                                          00089001
                                    900=*                                                            00090001
                     000DF          901=DECK     EQU   X'DF'                                          00091001
                     00020          902=NDECK    EQU   X'20'                                          00092001
                                    903=*                                                            00093001
                     000EF          904=EBCDIC   EQU   X'EF'                                          00094001
                     00010          905=ISO      EQU   X'10'                                          00095001
                                    906=*                                                            00096001
                                    907=*        TERMINATION SWITCHES IN COMPFLGS+1                  00097001
                                    908=*                                                            00098001
                     00008          909=ERR      EQU   X'08'                  PROGRAM INTERRUPT HAS   00099001
                                    910=*                                     OCCURED IN COMPILER     00100001
                     00004          911=TERM     EQU   X'04'                  LAST PHASE HAS BEEN ENTERED 00101001
                     00002          912=NOBUF    EQU   X'02'                  ERROR POOL IS IN WORKAREA 00102001
                                    913=*                                     NO SCE PROG BUFF 1      00103001
                     00001          914=NOGO     EQU   X'01'                  COMPILATION NOT POSSIBLE 00104001
                                    915=*                                     DO NOT START SCAN 1     00105001
                     00003          916=NOBUNOGO EQU   X'03'                  NOBUF AND NOGO          00106001
                                    917=*                                                            00107001
                                    918=*        SWITCHES IN COMPFLGS+2                              00108001
                                    919=*                                                            00109001
                     00080          920=PRT      EQU   X'80'                  SYSPRINT NOT AVAILABLE  00110001
                     00040          921=SPIC     EQU   X'40'                  SOURCE PROGRAM IN STORAGE 00111001
                     00020          922=NOPT     EQU   X'20'                  NO SUBSCRIPT OPTIMIZATION 00112001
                     00010          923=PRTNO    EQU   X'10'                  SYSPRINT NOT OPENED     00113001
                     00008          924=NOSC     EQU   X'08'                  SEMICOLON COUNTER NOT VALID 00114001
                                    925=*                                                            00115001
                     00004          926=NOTEST   EQU   X'04'                                          00116001
                     000FB          927=TEST     EQU   X'FB'                  EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                    928=*                                                            00118001
                     00002          929=SET60    EQU   X'02'                  60 CHARACTER SET IS TO BE USED 00119001
                                    930=*                                                            00120001
                                    931=*        MISCELLANEOUS CONTROL INFORMATION                   00121001
                                    932=*                                                            00122001
000084 0000B000                     933=SIZE     DC    F'45056'           AVAILABLE MAIN STORAGE - NOT USED 00123001
000088 00000000                     934=PICAADD  DC    A(0)               ADDR OF PICA OF THE INVOKER 00124001
00008C 00000000                     935=HDING    DC    F'0'               ADDR OF HEADING INFO OF THE INVOKER 00125001
000090 00000000                     936=ERET     DC    F'0'               RETURN ADDR FOR PROGRAM     00126001
                                    937=*                                 AND I/O ERRORS              00127001
000094 0000000C                     938=PAGECNT  DC    PL4'0'             PAGE COUNT                  00128001
000098 0000                         939=LINCNT   DC    H'0'               COUNTER OF LINES PER PAGE   00129001
00009A 0038                         940=MAXLINES DC    H'56'              MAX NUMBER OF PRINT LINES PER PAGE 00130001
00009C 0000                         941=SEMCNT   DC    H'0'               SEMICOLON COUNTER           00131001
00009E 0032                         942=PBN      DC    H'50'              HIGHEST PROGRAM BLOCK NUMBER 00132001
0000A0 0000                         943=KBN      DC    H'0'               HIGHEST CONSTANT POOL NUMBER 00133001
                     0001C          944=LATNR    EQU   28                 NR OF LIBRARY STAND FUNCTIONS 00134001
                     0006C          945=LATBEG   EQU   4*(LATNR-1)                                    00135001
0000A2 006C                         946=LN       DC    AL2(LATBEG)        LAST USED DISPLACEMENT IN LAT 00136001
0000A4 00000000                     947=PRPT     DC    F'0'               PROGRAM POINTER             00137001
0000A8 00000000                     948=SAVOUTA  DC    F'0'                                           00138001
0000AC                              949=OUTAREA2 DS    F                  SYSPUNCH SAVE AREA          00139001
0000B0 40404040                     950=PIDENT   DC    CL4' '             PROGRAM IDENTIFICATION      00140001
0000B4 0000000C                     951=CARDCNT  DC    PL4'0'             OBJECT PROGRAM DECK SEQUENCE NUMBER 00141001
0000B8 00000000                     952=PRTRTADD DC    A(0)               ADDR OF PRINT ROUTINE       00142001
                                    953=*                                                            00143001
                                    954=*        ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE 00144001
                                    955=*                                                            00145001
0000BC 00000278                     956=ERRPOOL  DC    A(PRELPOOL)        FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.13

0000C0 00000278                       957=NEXTERR  DC    A(PRELPOOL)         NEXT FREE PLACE IN ERROR POOL       00147001
0000C4                                958=ENDPOOL  DS    F                   LAST BYTE OF ERROR POOL-23          00148001
0000C8                                959=SRCE1ADD DS    F                   SOURCE PROGRAM BUFFER 1             00149001
0000CC                                960=SRCE1END DS    F                   ADDR OF LAST BYTE+1                 00150001
0000D0                                961=SULTSTRT DS    F                   ID OF LAST ITAB RECORD              00151001
                                      962=*                                                                      00152001
                                      963=*                                                                      00153001
                                      964=*        TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                   00154001
                                      965=*                                                                      00155001
0000D4                                966=INBLKS   DS    H                   MAX BLKSIZE FOR SYSIN    - NOT USED 00156001
0000D6                                967=PRTBLKS  DS    H                   MAX BLKSIZE SYSPRINT     - NOT USED 00157001
0000D8                                968=LINBLKS  DS    H                   MAX BLKSIZE FOR SYSLIN   - NOT USED 00158001
0000DA                                969=PCHBLKS  DS    H                   MAX BLKSIZE FOR SYSPUNCH - NOT USED 00159001
0000DC                                970=POOLS    DS    F                   SIZE OF ERROR POOL                  00160001
0000E0                                971=SRCE1S   DS    F                   SIZE OF SOURCE PROG BUFFERS 1 AND 2 00161001
                      000E0           972=SRCE3S   EQU   SRCE1S              SIZE OF SOURCE PROG BUFFERS 3 AND 4 00162001
0000E4                                973=ITAB10S  DS    F                   SIZE OF ITAB FOR PHASE 10           00163001
0000E8                                974=ITAB20S  DS    F                   SIZE OF ITAB FOR PHASE 20           00164001
0000EC                                975=ITAB30S  DS    F                   SIZE OF ITAB FOR PHASE 30           00165001
0000F0                                976=CRIDTABS DS    F                   SIZE OF CRIDTAB FOR PHASE 30        00166001
0000F4                                977=SUTAB30S DS    F                   SIZE OF SUTAB BUFFER OF PHASE 30    00167001
0000F8                                978=LVTAB30S DS    F                   SIZE OF LVTAB BUFFER FOR PHASE 30   00168001
0000FC                                979=OPTABS   DS    F                   SIZE OF OPTAB BUFFERS 1 AND 2       00169001
000100                                980=SUTAB40S DS    F                   SIZE OF SUTAB IN PHASE 40           00170001
000104                                981=LVTAB40S DS    F                   SIZE OF LVTAB IN PHASE 40           00171001
000108                                982=OOSTACKS DS    F                   SIZE OF OPERATOR/OPERAND STACK      00172001
                                      983=*                                                                      00173001
                                      984=*        AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF          00174001
                                      985=*        EACH NEW PAGE                                                 00175001
                                      986=*                                                                      00176001
                      0010C           987=PAGEHEAD EQU   *                                                       00177001
00010C 4040404040404040               988=PAGEHD1  DC    CL121' '                 FIRST HEADLINE                 00178001
000185                00185 0010C     989=         ORG   PAGEHD1                                                 00179001
00010C F1                             990=PAGEHD1C DC    C'1'                     ASA CNTL                       00180001
00010D 4040404040404040               991=         DC    CL10' '                  SPACER                         00181001
000117 4040404040404040               992=PAGEHD1D DC    CL100' '                 PAGE TEXT HEADING              00182001
00017B                0017B 0017D     993=         ORG   PAGEHD1+113                                             00183001
00017D D7C1C7C5                       994=PAGEHD1P DC    CL4'PAGE'                PAGE                           00184001
000181 40404040                       995=PAGENUMB DC    CL4' '                   PAGE COUNTER                   00185001
000185                00185 00185     996=         ORG                                                           00186001
                                      997=*                                                                      00187001
000185 4040404040404040               998=PAGEHD2  DC    CL121' '                 SECOND HEADLINE                00188001
0001FE                001FE 00185     999=         ORG   PAGEHD2                                                 00189001
000185 40                            1000=PAGEHD2C DC    C' '                     ASA CNTL                       00190001
000186 4040404040404040              1001=         DC    CL10' '                  SPACER                         00191001
000190 4040404040404040              1002=PAGEHD2D DC    CL100' '                 PAGE TEXT HEADING              00192001
0001F4                001F4 001FE    1003=         ORG                                                           00193001
                                     1004=*                                                                      00194001
0001FE 4040404040404040              1005=PAGEHD3  DC    CL121' '                 THIRD HEADLINE                 00195001
000277                00277 001FE    1006=         ORG   PAGEHD3                                                 00196001
0001FE 40                            1007=PAGEHD3C DC    C' '                     ASA CNTL                       00197001
0001FF 4040404040404040              1008=         DC    CL10' '                  SPACER                         00198001
000209 4040404040404040              1009=PAGEHD3D DC    CL100' '                 PAGE TEXT HEADING              00199001
00026D                0026D 00277    1010=         ORG                                                           00200001
                                     1011=*                                                                      00201001
                                     1012=*                                                                      00202001
                                     1013=*        END OF STANDARD COMMON AREA                                   00203001
                                     1014=*                                                                      00204001
                      00277          1015=STANDX   EQU   *                                                       00205001
                                     1016=*                                                                      00206001
                                     1017=*        THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL            00207001
                                     1018=*        PHASES AND PARTLY OVERLAY EACH OTHER                          00208001
                                     1019=*                                                                      00209001
                                     1020=*                            NAME OR PURPOSE         NEEDED BY PHASES 00210001
                                     1021=*                                                                      00211001
000277 00
000278                               1022=         DC    0F'0'                                                   00212001
000278 4040404040404040              1023=PRELPOOL DC    236C' ',20C'X' PRELIMINARY ERROR POOL     IEX10         00213001
000378                00378 00416    1024=         ORG   PRELPOOL+414                                            00214001
                                     1025=*                            DCB FOR SYSIN                  11         00215001
                                     1026=SYSIN    DCB   DDNAME=SYSIN,                                          X00216001
                                         =               DSORG=PS,                                              X00217001
                                         =               MACRF=(GM),                                            X00218001
                                         =               RECFM=FB,                                              X00219001
                                         =               LRECL=80,                                              X00220001
                                         =               BFTEK=S                                                 00221001


                                     1028+*                      DATA CONTROL BLOCK                            01-DCB
                                     1029+*                                                                    01-DCB
000416 0000
000418                               1030+SYSIN    DC    0F'0'                  ORIGIN ON WORD BOUNDARY        01-DCB

                                     1032+*                      DIRECT ACCESS DEVICE INTERFACE                01-DCB

000418 0000000000000000              1034+         DC    BL16'0'                  FDAD,DVTBL                   01-DCB
000428 00000000                      1035+         DC    A(0)                     KEYLE,DEVT,TRBAL             01-DCB

                                     1037+*                      COMMON ACCESS METHOD INTERFACE                01-DCB

00042C 00                            1039+         DC    AL1(0)                  BUFNO                         01-DCB
00042D 000001                        1040+         DC    AL3(1)                  BUFCB                         01-DCB
000430 0000                          1041+         DC    AL2(0)             BUFL                               01-DCB
000432 4000                          1042+         DC    BL2'0100000000000000'         DSORG                   01-DCB
000434 00000001                      1043+         DC    A(1)                     IOBAD                        01-DCB
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.13
                                     1045+*                       FOUNDATION EXTENSION                        01-DCB

000438 40                            1047+        DC    BL1'01000000'                BFTEK,BFLN,HIARCHY       01-DCB
000439 000001                        1048+        DC    AL3(1)                EODAD                               01-DCB
00043C 90                            1049+        DC    BL1'10010000'         RECFM                               01-DCB
00043D 000000                        1050+        DC    AL3(0)                EXLST                               01-DCB

                                     1052+*                       FOUNDATION BLOCK                            01-DCB

000440 E2E8E2C9D5404040              1054+        DC    CL8'SYSIN'            DDNAME                              01-DCB
000448 02                            1055+        DC    BL1'00000010'         OFLGS                               01-DCB
000449 00                            1056+        DC    BL1'00000000'                        IFLG                 01-DCB
00044A 5000                          1057+        DC    BL2'0101000000000000'  MACR                               01-DCB

                                     1059+*                       BSAM-BPAM-QSAM INTERFACE                    01-DCB

00044C 00                            1061+        DC    BL1'00000000'                                        RER1 01-DCB
00044D 000001                        1062+        DC    AL3(1)                CHECK, GERR, PERR                   01-DCB
000450 00000001                      1063+        DC    A(1)                  SYNAD                               01-DCB
000454 0000                          1064+        DC    H'0'                  CIND1, CIND2                        01-DCB
000456 0000                          1065+        DC    AL2(0)                BLKSIZE                             01-DCB
000458 00000000                      1066+        DC    F'0'                  WCPO, WCPL, OFFSR, OFFSW            01-DCB
00045C 00000001                      1067+        DC    A(1)                  IOBA                                01-DCB
000460 00                            1068+        DC    AL1(0)                NCP                                 01-DCB
000461 000001                        1069+        DC    AL3(1)                EOBR, EOBAD                         01-DCB

                                     1071+*                            QSAM INTERFACE                         01-DCB

000464 00000001                      1073+        DC    A(1)                   RECAD                              01-DCB
000468 0000                          1074+        DC    H'0'                  QSWS                                01-DCB
00046A 0050                          1075+        DC    AL2(80)         LRECL                                     01-DCB
00046C 00                            1076+        DC    BL1'00000000'         EROPT                               01-DCB
00046D 000001                        1077+        DC    AL3(1)                CNTRL                               01-DCB
000470 00000000                      1078+        DC    F'0'                  PRECL                               01-DCB
000474 00000001                      1079+        DC    A(1)                  EOB                                 01-DCB
                                     1080=*             SYNAD=SYNAD     (ASSEMBLED IN IEX00001)                 00222001
                                     1081=*             EODAD=EODADIN   (INSERTED BY IEX11)                     00223001
000478                 00478 00278   1082=        ORG   PRELPOOL                                                00224001
000278                               1083=PBTAB2  DS    CL510           PROGR. BLOCK TABLE 2          20-50     00225001
000478                               1084=        DS    0F                                                      00226001
000478                               1085=PBTAB1  DS    CL255           PROGR. BLOCK TABLE 1          11-20     00227001
000577                 00577 00478   1086=        ORG   PBTAB1                                                  00228001
000478                               1087=FSTAB   DS    CL255           FOR STATEMENT TABLE           30-40     00229001
                                     1088=*                             DCB FOR SYSUT1                11-30     00230001
                                     1089=SYSUT1  DCB   DDNAME=SYSUT1,                                         X00231001
                                         =              DSORG=PS,                                              X00232001
                                         =              MACRF=(R,W),                                           X00233001
                                         =              RECFM=F                                                 00234001


                                     1091+*                       DATA CONTROL BLOCK                          01-DCB
                                     1092+*                                                                   01-DCB
000577 00
000578                               1093+SYSUT1  DC    0F'0'                 ORIGIN ON WORD BOUNDARY             01-DCB

                                     1095+*                       DIRECT ACCESS DEVICE INTERFACE              01-DCB

000578 0000000000000000              1097+        DC    BL16'0'                FDAD,DVTBL                         01-DCB
000588 00000000                      1098+        DC    A(0)                   KEYLE,DEVT,TRBAL                   01-DCB

                                     1100+*                       COMMON ACCESS METHOD INTERFACE              01-DCB

00058C 00                            1102+        DC    AL1(0)                BUFNO                               01-DCB
00058D 000001                        1103+        DC    AL3(1)                BUFCB                               01-DCB
000590 0000                          1104+        DC    AL2(0)            BUFL                                    01-DCB
000592 4000                          1105+        DC    BL2'0100000000000000'          DSORG                      01-DCB
000594 00000001                      1106+        DC    A(1)                   IOBAD                              01-DCB

                                     1108+*                       FOUNDATION EXTENSION                        01-DCB

000598 00                            1110+        DC    BL1'00000000'                BFTEK,BFLN,HIARCHY       01-DCB
000599 000001                        1111+        DC    AL3(1)                EODAD                               01-DCB
00059C 80                            1112+        DC    BL1'10000000'         RECFM                               01-DCB
00059D 000000                        1113+        DC    AL3(0)                EXLST                               01-DCB

                                     1115+*                       FOUNDATION BLOCK                            01-DCB

0005A0 E2E8E2E4E3F14040              1117+        DC    CL8'SYSUT1'           DDNAME                              01-DCB
0005A8 02                            1118+        DC    BL1'00000010'         OFLGS                               01-DCB
0005A9 00                            1119+        DC    BL1'00000000'                        IFLG                 01-DCB
0005AA 2020                          1120+        DC    BL2'0010000000100000'  MACR                               01-DCB

                                     1122+*                       BSAM-BPAM-QSAM INTERFACE                    01-DCB

0005AC 00                            1124+        DC    BL1'00000000'                                        RER1 01-DCB
0005AD 000001                        1125+        DC    AL3(1)                CHECK, GERR, PERR                   01-DCB
0005B0 00000001                      1126+        DC    A(1)                  SYNAD                               01-DCB
0005B4 0000                          1127+        DC    H'0'                  CIND1, CIND2                        01-DCB
0005B6 0000                          1128+        DC    AL2(0)                BLKSIZE                             01-DCB
0005B8 00000000                      1129+        DC    F'0'                  WCPO, WCPL, OFFSR, OFFSW            01-DCB
0005BC 00000001                      1130+        DC    A(1)                  IOBA                                01-DCB
0005C0 00                            1131+        DC    AL1(0)                NCP                                 01-DCB
0005C1 000001                        1132+        DC    AL3(1)                EOBR, EOBAD                         01-DCB

                                     1134+*                         BSAM-BPAM INTERFACE                       01-DCB
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0005C4 00000001                    1136+         DC    A(1)               EOBW                               01-DCB
0005C8 0000                        1137+         DC    H'0'               DIRCT                              01-DCB
0005CA 0000                        1138+         DC    AL2(0)        LRECL                                   01-DCB
0005CC 00000001                    1139+         DC    A(1)               CNTRL, NOTE, POINT                 01-DCB
                                   1140=*              SYNAD=SYNAD,  (ASSEMBLED IN IEX00001)                 00235001
                                   1141=*              EODAD=EODAD1                                          00236001
                                   1142=*                                                                    00237001
0005D0                             1143=         DS    0F                                                    00238001
0005D0                             1144=SPTAB    DS    CL255         SCOPE TABLE                 11-30       00239001
0006D0                             1145=         DS    0F                                                    00240001
                      006CD        1146=GPTAB    EQU   *-3           GROUP TABLE                 11-30       00241001
0006D0                             1147=         DS    CL1510                                                00242001
                                   1148=*                                                                    00243001
                                   1149=*        END OF SYMLIB PART OF COMMON WORK AREA                      00244001
                                   1150=*                                                                    00245001
000CB8                             1151 KF0      DS    F                  ZERO CONSTANT                      00753001
000CBC                             1152 SAVE     DS    F                                                     00754001
000CC0                             1153 SAVE1    DS    4F                                                    00755001
000CD0                             1154 APBTAB2  DS    A                  START ADDR OF PBTAB2               00756001
000CD4                             1155 ATABAD   DS    A                  START ADDR OF ATAB                 00757001
000CD8                             1156 DPC      DS    F                  SAVE AREAS FOR R3, R4, R5 AND R6   00758001
000CDC                             1157 WPC      DS    F                                                     00759001
000CE0                             1158 HPC      DS    F                                                     00760001
000CE4                             1159 BPC      DS    F                                                     00761001
000CE8                             1160 AITAB    DS    F                  ITAB ADDR                          00762001
000CEC                             1161 APRNTAR  DS    A                  ADDR OF CURRENT PRINTAREA          00763001
000CF0                             1162 AREALOC  DS    A                  ADDR OF GETMAIN POOL               00764001
000CF4                             1163 SAVEPB   DS    F                  COUNTS NO OF BLOCKS READ           00765001
000CF8                             1164 LENCOUNT DS    H                  SAVES LENGTH OF BLOCK              00766001
000CFA                             1165 BITS1    DS    C                                                     00767001
                      00002        1166 PROCBIT  EQU   X'02'              PROCEDURE IS PROCESSED             00768001
                      000FD        1167 PROCOFF  EQU   X'FD'                                                 00769001
                                   1168 *                                                                    00770001
                                   1169 *        REGISTER EQUATES                                            00771001
                                   1170 *                                                                    00772001
                                   1171          IEZREGS                                                     00773001
                      00000        1172+R0       EQU   0                                                     01-IEZRE
                      00001        1173+R1       EQU   1                                                     01-IEZRE
                      00002        1174+R2       EQU   2                                                     01-IEZRE
                      00003        1175+R3       EQU   3                                                     01-IEZRE
                      00004        1176+R4       EQU   4                                                     01-IEZRE
                      00005        1177+R5       EQU   5                                                     01-IEZRE
                      00006        1178+R6       EQU   6                                                     01-IEZRE
                      00007        1179+R7       EQU   7                                                     01-IEZRE
                      00008        1180+R8       EQU   8                                                     01-IEZRE
                      00009        1181+R9       EQU   9                                                     01-IEZRE
                      0000A        1182+R10      EQU   10                                                    01-IEZRE
                      0000B        1183+R11      EQU   11                                                    01-IEZRE
                      0000C        1184+R12      EQU   12                                                    01-IEZRE
                      0000D        1185+R13      EQU   13                                                    01-IEZRE
                      0000E        1186+R14      EQU   14                                                    01-IEZRE
                      0000F        1187+R15      EQU   15                                                    01-IEZRE
                                   1188 *                                                                    00774001
000000                             1189          END   IEX20000                                              00775001
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Symbol    Length   Value     Id      Type Asm  Program    Defn  References                               X390 3.1.04  2012/08/17 13.13

AITAB          4 00000CE8 FFFFFFFF  F F                  1160   103M  146   181M  189   197   283   550M  578   583   714
                                                                716   718M  723M
ALLOSTAA       4 000001B0 00000001  I                     271   266B
ALLOSTOR       4 0000019C 00000001  I                     265   190B
APBTAB2        4 00000CD0 FFFFFFFF  A A                  1154   118M  378
APRNTAR        4 00000CEC FFFFFFFF  A A                  1161   685M
AREALOC        4 00000CF0 FFFFFFFF  A A                  1162   102M  749
ARRAY          4 000005E0 00000001  I                     647   615B
ATABAD         4 00000CD4 FFFFFFFF  A A                  1155   105M  176   396   545
AUT3DCB        4 0000006C FFFFFFFF  A A                   830   147   397   411
BITS1          1 00000CFA FFFFFFFF  C C                  1165   116M  628M  644M  661   664M
BOL            4 00000560 00000001  I                     610   600B
BOLA           4 00000564 00000001  I                     611   601B  605B  608B
BOOLEAN        2 0000023C 00000001  I                     312   293B
BOOLEANA       2 0000024E 00000001  I                     318   313B
BPC            4 00000CE4 FFFFFFFF  F F                  1159   314
CHECKNAA       4 00000190 00000001  I                     209   206B
CHECKNXT       4 00000166 00000001  I                     196   200B  204B  211B
COMPARE        4 0000069C 00000001  I                     724   729B
COMPFLGS       4 00000080 FFFFFFFF  X X                   874   109   119   131   294   325   351   408   537   540
CONST          4 0000029C 00000001  I                     341   291B
CONSTAA        4 000002D8 00000001  I                     356   352B  354B
CONVERT        4 00000612 00000001  I                     674   472B  553B  556B  665B
CONVERT2       4 000005E4 00000001  I                     657   641B  645B
DOUBLE         8 000007D8 00000001  D D                   777   560M  561   674M  675
DPC            4 00000CD8 FFFFFFFF  F F                  1156   282M  299   308   335   350   361
ENDBLOCK       4 000006BE 00000001  I                     740   566B  579B
ENDPOOL        4 000000C4 FFFFFFFF  F F                   958   475   497
ENDVAR         6 00000638 00000001  I                     701   598B  626B  627B  635B  638B
ENDVAR2        4 0000067A 00000001  I                     714   581B  712B
ENDVAR3        2 00000692 00000001  I                     721   717B
ERET           4 00000090 FFFFFFFF  F F                   936    90M  101M
ERRNAME        4 00000422 00000001  I                     490   453B  462B
ERRNAMEA       4 0000042A 00000001  I                     492   491M
ERRNAMEB       4 00000436 00000001  I                     495   493B
ERRNAMEC       4 00000426 00000001  I                     491   494B
EX1            4 000006B6 00000001  I                     731   725B
E0             4 00000460 00000001  I                     507   476B  498B
E43            4 000003DC 00000001  I                     453   207B  210B
E44            4 000003F4 00000001  I                     471   280B
E45            4 000003E8 00000001  I                     462   373B
FORMAL         4 00000598 00000001  I                     625   619B  621B  667B
FORMALA        4 000005B4 00000001  I                     632   630B
FORMALB        4 000005C4 00000001  I                     637   633B
FORMALC        4 000005A4 00000001  I                     628   658B
FORMPALL       6 000002E8 00000001  I                     361   366B  369B  372B  464B
FORMPARM       4 000002E0 00000001  I                     359   290B
FPLEN          2 00000824 00000001  H H                   789   133M  278   380
GETNEXT        4 000001CC 00000001  I                     281   276B  286B  288B  306B  316B  323B  333B  342B  344B
GETNVAR        4 000004FA 00000001  I                     576   719B  732B
GETPB          4 0000048C 00000001  I                     542   745B
GETPBA         2 00000490 00000001  I                     543   541B
HEAD1         16 00000702 00000001  C C                   767   126
HEAD2         90 00000712 00000001  C C                   769   127
HEAD3         90 0000076C 00000001  C C                   771   128
HPC            4 00000CE0 FFFFFFFF  F F                  1158   320
IEX20000       1 00000000 00000001  J                      54    86U 1189
INITIAL        4 00000072 00000001  I                     113   110B
INITIALA       2 000000C4 00000001  I                     130   120B
INTEGER        2 0000021A 00000001  I                     302   298B
INTEGERA       6 0000022E 00000001  I                     308   303B
ITABLOOA       6 00000382 00000001  I                     416   414B
ITABLOOP       4 00000368 00000001  I                     410   445B
ITABPRNT       4 0000047A 00000001  I                     537   446B
ITABPRNX       2 000004F8 00000001  I                     568   564B
ITAB20S        4 000000E8 FFFFFFFF  F F                   974    91   104   746
ITLP2          4 000003C8 00000001  I                     442   409B
KA11           2 00000896 00000001  R A                   805   563
KF0            4 00000CB8 FFFFFFFF  F F                  1151   107M  740
KF24           4 00000820 00000001  F F                   788   711
KF256          4 000007C8 00000001  F F                   774   724   728
KF4095         4 00000804 00000001  F F                   780   279
LASTREC        2 00000316 00000001  I                     375   284B  481B
LATBEG         1 0000006C           U                     945   946
LATNR          1 0000001C           U                     944   945
LENCOUNT       2 00000CF8 FFFFFFFF  H H                  1164   179M  180   416M  417   547M  548   563
LINCNT         2 00000098 FFFFFFFF  H H                   939   121M
LNG            1 00000002           U                     884   131   294   325   351
MOVE           6 00000474 00000001  I                     513   501X
MOVEITAB       6 000007E0 00000001  I                     778   731X
MOVEVAR        6 00000808 00000001  I                     782   707X
NEXTERR        4 000000C0 FFFFFFFF  A A                   957   473   477M  495   499   500M  507   510M
NOTTYPE        4 000002F6 00000001  I                     365   360B
NOTTYPEA       4 0000030A 00000001  I                     371   368B
NSRCE          1 00000080           U                     896   119   537
PAGEHD1      121 0000010C FFFFFFFF  C C                   988   989   993
PAGEHD1C       1 0000010C FFFFFFFF  C C                   990   122M  123M
PAGEHD1D     100 00000117 FFFFFFFF  C C                   992   124   125   126M
PAGEHD2      121 00000185 FFFFFFFF  C C                   998   999
PAGEHD2D     100 00000190 FFFFFFFF  C C                  1002   124M  127M
PAGEHD3      121 000001FE FFFFFFFF  C C                  1005  1006
PAGEHD3D     100 00000209 FFFFFFFF  C C                  1009   125M  128M
PBN            2 0000009E FFFFFFFF  H H                   942   383   413   443   744
PBTAB1       255 00000478 FFFFFFFF  C C                  1085   555  1086
PBTAB2       510 00000278 FFFFFFFF  C C                  1083   117
PRCH4          4 00000390 00000001  F F                   422   437
PRELPOOL       1 00000278 FFFFFFFF  C C                  1023   956   957  1024  1082
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Symbol    Length    Value     Id     Type Asm  Program   Defn  References                X390 3.1.04  2012/08/17 13.13

PRINTITB       4 00000622 00000001  I                    682   129B  551B  565B  713B  742B
PROC           1 00000004           U                    881   109   408   540
PROCBIT        1 00000002           U                   1166   644   661
PROCEDUR       4 000005D4 00000001  I                    643   618B  623B
PROCOFF        1 000000FD           U                   1167   628   664
PRTRTADD       4 000000B8 FFFFFFFF  A A                  952   683
READBLK        4 000000D2 00000001  I                    146   132B  386B
REAL           6 00000210 00000001  I                    299   295B
R0             1 00000000           U                   1172    93M  707   748M
R1             1 00000001           U                   1173    91M   92M   93   102   103   104M  105   113   130M  382M
                                                               383   384M  385   554   557   561   562   685   746M  747M
                                                               748   749M  782   784   786
R10            1 0000000A           U                   1182   117M  118   345M  346M  347M  348M  349M  355M  356   397M
                                                               403   410M  415   416   430   454   463   473M  474   478
                                                               480   499M  503   504   513   577M  582M  583   585   587
                                                               589   714M  721M  722   724   728M  731
R11            1 0000000B           U                   1183    86U   87M
R12            1 0000000C           U                   1184   129M  146M  162   174   177   178   179   180M  181   396M
                                                               410   412   442M  472M  474M  475   477   479   490M  491
                                                               494M  496   501   502M  503   507M  508   509   510   543M
                                                               544M  546   548M  549M  550   551M  553M  556M  559M  560
                                                               565M  665M  677B  688B  713M  715M  716   721   722M  723
                                                               742M  743M  744
R13            1 0000000D           U                   1185    88U
R14            1 0000000E           U                   1186   378M  379M  381   539M  542M  543   552   555   682   684M
                                                               686M  743
R15            1 0000000F           U                   1187    82    87    89M   90   100M  101   111M  112   417M  431
                                                               453M  462M  505B  682   683M  684B  686M
R2             1 00000002           U                   1174   106M  107   108   113   114   116   147M  161   173M  174M
                                                               175M  177   375M  376M  377M  379   407M  413   443   444M
R3             1 00000003           U                   1175   267M  271M  278M  279   282   309   336   337   338   356M
                                                               362M  380M  381   471M  552M  555M  659M  660M  663M  674
R4             1 00000004           U                   1176   272M  302M  305M  309M  327M  330   331   332M  338M
R5             1 00000005           U                   1177   273M  318M  321   322M  331M  337M  412M  415   568M  687M
                                                               707   710M  711   740
R6             1 00000006           U                   1178   274M  282   312M  315M  321M  330M  336M
R7             1 00000007           U                   1179   176M  177   182M  185M  188M  189   191   193   195   201
                                                               205   275M  281M  283   285   287   289   292   297   299
                                                               304   308   314   320   329   335   341   343   346   350
                                                               353   359   361   365   367   371   411M  429   492   513
                                                               576M  577   578   580   587   589M  597   599   602   611
                                                               614   617   620   625   629   632   657   659   701   703
                                                               715   718   722   726   727M  778
R8             1 00000008           U                   1180   178M  182   183   185   265   268   275   376   545M  546M
                                                               547   549   558   576
R9             1 00000009           U                   1181   195M  196M  197   199   201   209   495M  496M  497   500
SAVE           4 00000CBC FFFFFFFF  F F                 1152   114M  115   480   554   557   666   675M  676M
SAVEPB         4 00000CF4 FFFFFFFF  F F                 1163   108M  112M  382   385M  471
SAVE1          4 00000CC0 FFFFFFFF  F F                 1153   115M  682M  686
SAVE2          3 000007CC 00000001  C C                  775   703M  704
SAVE3          5 000007CF 00000001  X X                  776   704M  705M  706
SCANNXT        4 00000148 00000001  I                    188   184B  192B  194B  198B  455B
SCANNXTA       4 0000014C 00000001  I                    189   186B
SCSAVE         2 000007C6 00000001  H H                  773   558M  559
SLUT           4 000006D6 00000001  I                    746   100   511B  538B
SLUT2          2 000006EA 00000001  H H                  757    89
SRCE1S         4 000000E0 FFFFFFFF  F F                  971   972
STARTALL       2 000001B4 00000001  I                    272   269B
STORALLA       4 000001C4 00000001  I                    279   357B  363B
STORALLO       4 000001C0 00000001  I                    278   300B  310B  339B
SWITCH         4 000005CC 00000001  I                    640   613B
TAB           16 00000886 00000001  C C                  804   705
TAKEDP         6 00000286 00000001  I                    335   326B  328B
TESTNXT        4 00000510 00000001  I                    582   586B  588B  590B
TESTPROC       4 0000057C 00000001  I                    617   612B
TESTVAR        4 00000534 00000001  I                    597   584B
TESTVARA       4 00000558 00000001  I                    607   603B
TESTWPA        4 00000264 00000001  I                    325   319B
TRINTEXT      96 00000826 00000001  C C                  795   702
UT3DECB        4 000000E0 00000001  F F                  154   168
WORK          30 000007E6 00000001  C C                  779   604M  607M  610M  616M  622M  631M  634M  637M  640M  643M
                                                               647M  666M  701M  702M  706M  708M  709M  782   784   786
WORKAREA       1 00000000 FFFFFFFF  J                    809    88U
WPC            4 00000CDC FFFFFFFF  F F                 1157   304   329
```

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Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)          X390 3.1.04  2012/08/17 13.13

   0(0)     93M  748M
   1(1)     91M   92M  93     97M  102   103   104M  105   113   130M  153M  161N  162N  163N  168M  169   382M  383
           384M  385   401M  403N  404   421M  429N  430N  431N  432N  437M  438   554   557   561   562   685   746M
           747M  748   749M  753M  782   784   786
   2(2)    106M  107   108   113   114   116   147M  161   173M  174M  175M  177N  375M  376M  377M  379N  407M  413
           443   444M
   3(3)    267M  271M  278M  279   282   309   336   337   338   356M  362M  380M  381   471M  552M  555M  659M  660M
           663M  674
   4(4)    272M  282   302M  305M  309M  327M  330   331   332M  338M
   5(5)    273M  282   318M  321   322M  331M  337M  412M  415   568M  687M  707N  710M  711   740
   6(6)    274M  282   312M  315M  321M  330M  336M
   7(7)    176M  177   182M  185M  188M  189   191   193   195   201   205   275M  281M  283   285   287   289   292
           297   299   304   308   314   320   329   335   341   343   346N  350   353   359   361   365   367   371
           411M  429   492   513   576M  577   578   580   587   589M  597   599   602   611   614   617   620   625
           629   632   657   659   701   703   715   718   722   726   727M  778
   8(8)    178M  182   183   185   265   268   275   376   545M  546M  547   549   558   576
   9(9)    195M  196M  197   199   201   209   495M  496M  497   500
  10(A)    117M  118   345M  346M  347M  348M  349M  355M  356N  397M  403   410M  415   416   430   454   463   473M
           474   478   480   499M  503   504   513   577M  582M  583   585   587   589   714M  721M  722N  724   728M
           731
  11(B)     86U   87M
  12(C)    129M  146M  162   174   177   178   179   180M  181   396M  410   412   442M  472M  474M  475   477   479
           490M  491   494M  496N  501   502M  503   507M  508   509   510   543M  544M  546N  548M  549M  549N  550
           551M  553M  556M  559M  560   565M  665M  677B  688B  713M  715M  716   721   722M  723   742M  743M  744
  13(D)     88U
  14(E)    165M  169M  170   171M  378M  379M  381   434M  438M  439   440M  539M  542M  543   552   555N  682   684M
           686M  743
  15(F)     82B   87    89M   90   100M  101   111M  112   163M  164M  165B  170M  171B  417M  431   432M  433M  434B
           439M  440B  453M  462M  505B  682   683M  684B  686M  759M
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| WORKAREA | 00000CFB | FFFFFFFF | 809 | | PRIMARY INPUT |

```
Con Source       Members                                                                            X390 3.1.04  2012/08/17 13.13

  1 SYS1.MACLIB
               CHECK    CLOSE    DCB      FREEMAIN GETMAIN  IEZREGS  IHBINNRA IHBINNRB IHBRDWRS IHB01    READ
               WRITE    XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
  4 SYSD.ALGOLF.MACLIB
               IEXENTRY WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text |
|---|---|---|---|---|---|---|---|---|---|---|
| 86 | | USING | Ordinary | 00000001 | 00000000 | 00001000 | 11 | 00896 | 786 | IEX20000,R11 |
| 88 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 13 | 00CFA | 749 | WORKAREA,R13 |

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X20    STEPNAME: IEX20    PROCSTEP: X390

Primary input:  lines      1 to     775 of SYSD.ALGOLF.ASM(IEX20)

SYSLIB library records read: 3892

SYSUT1 work file size: 118909 bytes

SYSUT2 work file size: 333818 bytes

SYSUT3 work file size: 62000 bytes

SYSLIN file records written: 43

TXA000I Return code 0, elapsed time 1.47 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

```
Csect    Rel Addr(hex) Length(dec)

 No uninitialized areas found
```

# IEX21

LEVEL

V2.M01

        X390 3.1.04  2012/08/17 13.13

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       --------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX21)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131303.RA000.T1X21.OBJECT
SYSPRINT    JES2.JOB09272.SO0102
SYSUT1      SYS12230.T131303.RA000.T1X21.SYSUT1
SYSUT2      SYS12230.T131303.RA000.T1X21.SYSUT2
SYSUT3      SYS12230.T131303.RA000.T1X21.SYSUT3
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                      2 *                                                                      00002001
                                      3 *       COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                    00003001
                                      4 *                                                                      00004001
                                      5 *       FUNCTION/OPERATION -                                           00005001
                                      6 *       THE ERROR PATTERNS GENERATED DURING SCANI/II AND ITAB          00006001
                                      7 *       MANIPULATION ARE HANDLED AND THE CORRESPONDING                 00007001
                                      8 *       DIAGNOSTIC MESSAGES ARE GENERATED                              00008001
                                      9 *                                                                      00009001
                                     10 *       ENTRY POINT -                                                  00010001
                                     11 *       IEX21000 - ERROR MESSAGE EDITING XCTL EP=IEX21                 00011001
                                     12 *       THE MODULE IS ENTERED FROM IEX20                               00012001
                                     13 *                                                                      00013001
                                     14 *       INPUT - N/A                                                    00014001
                                     15 *                                                                      00015001
                                     16 *       OUTPUT -                                                       00016001
                                     17 *       THE DIAGNOSTIC MESSAGES ARE PUT OUT ON SYSPRINT                00017001
                                     18 *       IF SYSPRINT IS NOT AVAILABLE A WTO IS ISSUED                   00018001
                                     19 *                                                                      00019001
                                     20 *       EXTERNAL ROUTINE -                                             00020001
                                     21 *       THE PRINT ROUTINE IN IEX00 IS USED                             00021001
                                     22 *                                                                      00022001
                                     23 *       EXIT - NORMAL -                                                00023001
                                     24 *       IF NO TERMINATING ERROR HAS OCCURRED, CONTROL IS GIVEN         00024001
                                     25 *       TO THE NEXT PHASE BY MEANS OF XCTL EP=IEX30000                 00025001
                                     26 *                                                                      00026001
                                     27 *       EXIT - ERROR -                                                 00027001
                                     28 *       IF A TERMINATING ERROR HAS OCCURRED (IN THIS MODULE OR         00028001
                                     29 *       ONE OF THE PRECEDING) CONTROL IS GIVEN TO THE                  00029001
                                     30 *       TERMINATING MODULE BY MEANS OF XCTL EP=IEX51002                00030001
                                     31 *                                                                      00031001
                                     32 *       TABLES/WORKAREAS -                                             00032001
                                     33 *       THE MESSAGE TEXTS WITH CORRESPONDING ADDR TABLE ARE            00033001
                                     34 *       IN THE LOAD MODULE IEX21M                                      00034001
                                     35 *       THE ERROR MESSAGE EDITING ROUTINE, CSECT IEX60000, ALSO        00035001
                                     36 *       USES THE FOLLOWING TABLES -                                    00036001
                                     37 *       WINTEBC  - TRANSLATION OF INTERNAL CHARACTERS TO EBCDIC        00037001
                                     38 *       WSYMBSRC - TRANSLATION OF SOURCE OPERATORS                     00038001
                                     39 *       WSYMBSTK - TRANSLATION OF STACK OPERATORS                      00039001
                                     40 *       WORDSEBC - TRANSLATION OF COMPOUND SYMBOLS IF SOURCE IN        00040001
                                     41 *                  EBCDIC                                              00041001
                                     42 *       WORDSISO - TRANSLATION OF COMPOUND SYMBOLS IF SOURCE IN        00042001
                                     43 *                  ISOCODE                                             00043001
                                     44 *       WEBCDIC  - TRANSLATION EBCDIC EBCDIC                           00044001
                                     45 *       A WORKAREA OF 270 BYTES, WAREA, IS USED FOR BUILDING           00045001
                                     46 *       THE MESSAGES                                                   00046001
                                     47 *                                                                      00047001
                                     48 *       NOTES -                                                        00048001
                                     49 *       CHARACTER CODE DEPENDENCE - FOR THE BUILDING OF A MESSAGE      00049001
                                     50 *       (CODE PART BETWEEN COT03 AND COT12) THE FOLLOWING              00050001
                                     51 *       APPLIES, IN CASE NO SOURCE INFORMATION IS TO BE INSERTED       00051001
                                     52 *       (COT31), OR IF THE INFORMATION IS EBCDIC CHARACTERS            00052001
                                     53 *       (COT07), THE OPERATION OF CSECT IEX60000 DEPENDS UPON AN       00053001
                                     54 *       INTERNAL REPRESENTATION OF THE EXTERNAL CHARACTER SET          00054001
                                     55 *       WHICH IS EQUIVALENT TO THE ONE USED AT ASSEMBLY TIME.          00055001
                                     56 *       IF THE SOURCE INFORMATION TO BE INSERTED IS INTERNAL           00056001
                                     57 *       CHARACTERS (COT33) THE OPERATION OF CSECT IEX60000             00057001
                                     58 *       DEPENDS UPON A TRANSLATION FROM THE INTERNAL                   00058001
                                     59 *       REPRESENTATION TO THE EBCDIC CHARACTER SET BY MEANS OF         00059001
                                     60 *       THE TABLE WINTEBC.                                             00060001
                                     61 *       IF THE SOURCE INFORMATION TO BE INSERTED IS INTERNAL           00061001
                                     62 *       ALGOL SYMBOLS (COT10) THE OPERATION OF CSECT IEX60000          00062001
                                     63 *       DEPENDS UPON A TRANSLATION FROM THE INTERNAL                   00063001
                                     64 *       REPRESENTATION TO THE EBCDIC CHARACTER SET BY MEANS OF         00064001
                                     65 *       THE TABLES 'WSYMBSTK'/'WSYMBSRC' AND 'WORDSISO'/               00065001
                                     66 *       'WORDSEBC'.                                                    00066001
                                     67 *       FOR THE OUTPUT OF A MESSAGE (CODE PART BETWEEN COT12           00067001
                                     68 *       AND COT21) THE FOLLOWING APPLIES -                             00068001
                                     69 *       WHEN A MESSAGE HAS BEEN BUILT IN EBCDIC, AN EBCDIC TO          00069001
                                     70 *       EBCDIC TRANSLATION IS PERFORMED BEFORE OUTPUT BY MEANS         00070001
                                     71 *       OF THE TABLE WEBCDIC. THUS THE OUTPUT MAY BE MODIFIED          00071001
                                     72 *       BY MAKING CHANGES IN THIS TABLE                                00072001
                                     73 *                                                                      00073001
                                     74 *       THE OPERATION OF CSECT IEX21000 DOES NOT DEPEND UPON A         00074001
                                     75 *       PARTICULAR INTERNAL REPRESENTATION OF THE EXTERNAL             00075001
                                     76 *       CHARACTER SET                                                  00076001
                                     77 *                                                                      00077001
                                     78 *       THIS MODULE IS LINKED WITH THE MODULE IEX21M TO FORM           00078001
                                     79 *       MODULE IEX21                                                   00079001
                                     80 *                                                                      00080001
                                     81 *       THIS MODULE IS ONLY INTENDED TO BE EXECUTED IN                 00081001
                                     82 *       CONNECTION WITH THE OTHER MODULES OF THE ALGOL COMPILER        00082001
                                     83 *       IN PARTICULAR IT REQUIRES THE COMMON WORKAREA.                 00083001
                                     84 *                                                                      00084001
000000              00000 0005C      85 IEX21000 CSECT                                                         00085001
                                     86 *                                                                      00086001
                                     87          IEXENTRY 'IEX21000 LEVEL 2.1 &SYSDATE &SYSTIME'               00087001
                                     88+*                                                                      01-IEXEN
000000 47F0 F026          00026      89+         B     38(,R15)         BRANCH AROUND ID                       01-IEXEN
000004 21                            90+         DC    AL1(33)          LENGTH OF IDENTIFIER                   01-IEXEN
000005 C9C5E7F2F1F0F0F0              91+         DC    CL33'IEX21000 LEVEL 2.1 08/17/12 13.13'                +01-IEXEN
                                       +                                              IDENTIFIER               01-IEXEN
                                     92 *                                                                      00088001
               R:F  00000            93          USING IEX21000,R15                                            00089001
                                     94 *                                                                      00090001
000026 5820 F058          00058      95          L     R2,=A(IEX60000)        ADDR ERROR MSG EDIT ROUTINE      00091001
00002A 41E0 F034          00034      96          LA    R14,SCAN3              LOAD RETURN ADDR                 00092001
```

```
  Active USINGs: IEX21000,R15

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00002E 4110 F04C            0004C    97          LA     R1,ERRINFO             ADDR INFO FOR ERROR ED ROUTINE   00093001
000032 07F2                          98          BR     R2                     GOTO ERROR MESSAGE EDITING       00094001
                                     99 *                                                                       00095001
                                    100 SCAN3    XCTL   EP=IEX30000                                             00096001
000034                              101+SCAN3    DS     0H                                                      01-XCTL
000034                              102+         CNOP   0,4                                                     02-IHBIN
000034 45F0 F048            00048   103+         BAL    15,*+20           BRANCH AROUND CONSTANTS               02-IHBIN
000038 00000040                     104+         DC     A(*+8)            ADDR. OF PARM. LIST                   02-IHBIN
00003C 00000000                     105+         DC     A(0)               DCB ADDRESS PARAMETER                02-IHBIN
000040 C9C5E7F3F0F0F0F0             106+         DC     CL8'IEX30000'      EP PARAMETER                         02-IHBIN
000048 0A07                         107+         SVC    7                               ISSUE XCTL SVC          01-XCTL
                                    108 *                                                                       00097001
00004A 0000
00004C 00000000                     109 ERRINFO  DC     V(IEX21M00)            ADDR OF MESSAGE TEXTS            00098001
000050 00000000                     110          DC     V(IEX21M01)            ADDR OF ADDR TABLE               00099001
000054 0098                         111          DC     H'152'                 MODIFICATION NUMBER              00100001
                                    112 *                                                                       00101001
000058                              113          LTORG                                                          00102001
000058 00000060                     114                 =A(IEX60000)
                                    115 *                                                                       00103001
                                    116          COPY   IEX60000                                                00104001
```

```
  Active USINGs: IEX21000,R15

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    118=*                                                                     00002001
                                    119=*         COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                 00003001
                                    120=*                                                                     00004001
000060                00060 00824   121=IEX60000 CSECT                                                        00005001
                                    122=*                                                                     00006001
                 R:2  00060         123=          USING IEX60000,R2                                           00007001
                                    124=*                                                                     00008001
                                    125=*         REGISTER DEFINITIONS                                        00009001
                                    126=*                                                                     00010001
                                    127=*         R1                        POINTS TO PARAMETER LIST          00011001
                                    128=*         R1                        RETURNS ADDR OF PRINT BUFFER      00012001
                                    129=*         R2                        BASE REGISTER FOR COTEMER         00013001
                                    130=*         R4                        BASE REGISTER FOR MESSAGE POOL    00014001
                                    131=*         R5                        POINTER TO ENTRY IN ERROR POOL    00015001
                                    132=*         R6                        POINTER TO INSERTION CODE         00016001
                                    133=*         R7                        POINTER TO ENTRY IN MSG POOL      00017001
                                    134=*         R14                       PTR TO MESSAGE TEXT WORKAREA      00018001
                                    135=*                                                                     00019001
                                    136=*         INITIALIZATION                                              00020001
                                    137=*                                                                     00021001
                 R:D  00000         138=          USING WORKAREA,R13        BASEREG FOR WORKAREA DSECT        00022001
000060 D209 2518 1000 00578 00000   139=          MVC   AWEMPOOL(10),0(R1)  GET ADDRS AND MOD NUMBER          00023001
000066 4190 233E            0039E   140=COT00     LA    R9,WDIRET1          STORE RETURN ADDR                 00024001
00006A 5090 D090            00090   141=          ST    R9,ERET             IN WORKAREA                       00025001
00006E 90EF 252C            0058C   142=          STM   R14,R15,SVAR1       SAVE RETURN ADDR AND BASE         00026001
000072 9190 D082      00082         143=          TM    COMPFLGS+2,PRT+PRTNO  SYSPRINT DOWN/NOT OPENED ?      00027001
000076 4770 2346            003A6   144=          BNZ   COT18               YES, GIVE CONSOLE MESSAGE         00028001
00007A 5850 D0BC            000BC   145=          L     R5,ERRPOOL          ADDR ERROR POOL                   00029001
00007E 5550 D0C0            000C0   146=          CL    R5,NEXTERR          ERROR POOL EMPTY ?                00030001
000082 4780 231C            0037C   147=          BE    COT28               YES                               00031001
000086 D50A D133 24DE 00133 0053E   148=          CLC   PAGEHEAD+39(L'HEADD1),HEADD1  HEADINGS ALREADY SET ?  00032001
00008C 4780 2056            000B6   149=          BE    COT01               YES, BYPASS HEADINGS              00033001
000090 92FF D099      00099         150=          MVI   LINCNT+1,255        FORCE HEADINGS TO BE PRINTED      00034001
000094 9240 D10D      0010D         151=          MVI   PAGEHD1C+1,C' '     BLANK FIRST HEADING LINE          00035001
000098 D26C D10E D10D 0010E 0010D   152=          MVC   PAGEHD1C+2(109),PAGEHD1C+1                            00036001
00009E D263 D190 D117 00190 00117   153=          MVC   PAGEHD2D(L'PAGEHD2D),PAGEHD1D  BLANK 2ND HEADING LINE 00037001
0000A4 D263 D209 D117 00209 00117   154=          MVC   PAGEHD3D(L'PAGEHD3D),PAGEHD1D  BLANK 3RD HEADING LINE 00038001
0000AA D20A D13E 24DE 0013E 0053E   155=          MVC   PAGEHD1D+39(L'HEADD1),HEADD1   MOVE IN HEADD1         00039001
0000B0 D21A D190 24E9 00190 00549   156=          MVC   PAGEHD2D(L'HEADD2),HEADD2      MOVE IN HEADD2         00040001
                                    157=*                                                                     00041001
                                    158=*         HANDLING OF THE ENTRIES IN ERROR POOL                       00042001
                                    159=*                                                                     00043001
0000B6 5840 2518            00578   160=COT01     L     R4,AWEMPOOL         ADDR ERROR MESSAGE POOL           00044001
0000BA 1B77                         161=          SR    R7,R7                                                 00045001
0000BC 4370 5001            00001   162=          IC    R7,1(,R5)           GET ERROR MSG NUMBER              00046001
0000C0 41A0 00C8            000C8   163=          LA    R10,200                                               00047001
0000C4 197A                         164=          CR    R7,R10              DIRECTORY MESSAGE ?               00048001
0000C6 4740 2070            000D0   165=          BL    COT36               NO                                00049001
0000CA 48A0 2520            00580   166=          LH    R10,MODNUMB         YES, MODIFY NUMBER                00050001
0000CE 1B7A                         167=          SR    R7,R10                                                00051001
0000D0 8970 0002            00002   168=COT36     SLL   R7,2                GET IT FOUR TIMES                 00052001
0000D4 5890 251C            0057C   169=          L     R9,AWADDTAB         ADDR ADDR TABLE                   00053001
0000D8 1A79                         170=          AR    R7,R9               GET CORRECT ENTRY                 00054001
0000DA 5870 7000            00000   171=          L     R7,0(,R7)           LOAD ADDR TO ENTRY IN ERMSG POOL  00055001
                                    172=*                                                                     00056001
                                    173=*         GET LENGTH OF INSERT CODE PART                              00057001
                                    174=*                                                                     00058001
0000DE 4160 7002            00002   175=COT02     LA    R6,2(,R7)           POINT TO FIRST INSERTION CODE     00059001
0000E2 1B99                         176=          SR    R9,R9                                                 00060001
0000E4 4390 7001            00001   177=          IC    R9,1(,R7)           GET NUMBER OF INSERTION CODES     00061001
0000E8 18A9                         178=          LR    R10,R9                                                00062001
0000EA 18C9                         179=          LR    R12,R9                                                00063001
0000EC 41C0 C001            00001   180=          LA    R12,1(,R12)         SET INSERTION CODE COUNTER        00064001
0000F0 8990 0001            00001   181=          SLL   R9,1                DOUBLE IT                         00065001
0000F4 1A9A                         182=          AR    R9,R10              GET IT 3 TIMES                    00066001
                                    183=*                                                                     00067001
                                    184=*         HANDLE SEVERITY CODE                                        00068001
                                    185=*                                                                     00069001
0000F6 41A9 7002            00002   186=COT03     LA    R10,2(R9,R7)        GET ADDR TO BYTE BEFORE TEXT      00070001
0000FA D200 23D9 A000 00439 00000   187=          MVC   WAREA+9(1),0(R10)   INSERT SEVERITY CODE              00071001
000100 95E6 A000      00000         188=          CLI   0(R10),C'W'                                           00072001
000104 4770 20B0            00110   189=          BNE   COT03A                                                00073001
000108 9620 D080      00080         190=          OI    COMPFLGS,WERR       SET WARNING MESSAGE               00074001
00010C 47F0 20C8            00128   191=          B     COT04                                                 00075001
                                    192=*                                                                     00076001
000110 95E2 A000      00000         193=COT03A    CLI   0(R10),C'S'                                           00077001
000114 4770 20C4            00124   194=          BNE   COT03B                                                00078001
000118 9610 D080      00080         195=          OI    COMPFLGS,SERR       SET SEVERE ERROR                  00079001
00011C 9680 D080      00080         196=          OI    COMPFLGS,COMPMODE   SET SYNTAX CHECK MODE             00080001
000120 47F0 20C8            00128   197=          B     COT04                                                 00081001
                                    198=*                                                                     00082001
000124 9608 D080      00080         199=COT03B    OI    COMPFLGS,TERR       SET BIT FOR TERMINATING ERROR     00083001
                                    200=*                                                                     00084001
                                    201=*         INSERTION OF MSG NUMBER AND SEMICOLON COUNTER               00085001
                                    202=*                                                                     00086001
000128 1BAA                         203=COT04     SR    R10,R10             CLEAR REG                         00087001
00012A 43A5 0001            00001   204=          IC    R10,1(R5)           GET ERROR MSG NUMBER              00088001
00012E 4EA0 23C8            00428   205=          CVD   R10,WDEC+8                                            00089001
000132 F327 23D3 23C8 00433 00428   206=          UNPK  WAREA+3(3),WDEC+8(8)  CONVERT TO PRINTABLE DECIMAL    00090001
000138 96F0 23D5      00435         207=          OI    WAREA+5,X'F0'       MAKE CHAR PRINTABLE               00091001
00013C 9180 5000      00000         208=          TM    0(R5),X'80'         BLANKS FOR SC ?                   00092001
000140 4780 20F2            00152   209=          BZ    COT26               NO                                00093001
000144 D204 23DC 2534 0043C 00594   210=          MVC   WAREA+12(5),BLANKS  YES, MOVE BLANKS                  00094001
00014A 947F 5000      00000         211=          NI    0(R5),X'7F'         REMOVE TAG                        00095001
00014E 47F0 2104            00164   212=          B     COT31                                                 00096001
                                    213=*                                                                     00097001
```

```
  Active USINGs: WORKAREA,R13  IEX60000,R2  IEX21000,R15

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

000152 48A0 5002            00002   214=COT26    LH    R10,2(,R5)              GET SEMICOLON COUNTER             00098001
000156 4EA0 23C8            00428   215=         CVD   R10,WDEC+8                                                00099001
00015A F347 23DC 23C8 0043C 00428   216=         UNPK  WAREA+12(5),WDEC+8(8)   CONVERT TO READABLE DECIMAL       00100001
000160 96F0 23E0      00440         217=         OI    WAREA+16,X'F0'          MAKE CHAR PRINTABLE               00101001
                                    218=*                                                                        00102001
                                    219=*        INSERTION OF FIXED MESSAGE                                      00103001
                                    220=*                                                                        00104001
000164 41E0 23E4            00444   221=COT31    LA    R14,WAREA+20            POINT TO FIRST TEXTBYTE IN WAREA 00105001
000168 9500 7001      00001         222=         CLI   1(R7),0                 ANY INSERTION CODE ?              00106001
00016C 4770 2126            00186   223=         BNE   COT05                   YES                               00107001
000170 41A0 7003            00003   224=         LA    R10,3(,R7)              GET ADDR OF MSG TXT               00108001
000174 1BBB                         225=         SR    R11,R11                                                   00109001
000176 43B0 7000            00000   226=         IC    R11,0(,R7)              GET L'ENTRY                       00110001
00017A 1AB7                         227=         AR    R11,R7                  GET NEXT ENTRY                    00111001
00017C 1BBA                         228=         SR    R11,R10                 GET L'MSG TXT                     00112001
00017E 44B0 23AC            0040C   229=         EX    R11,WMOVE1              MOVE MSG TXT TO WORKAREA          00113001
000182 41EB E001            00001   230=         LA    R14,1(R11,R14)          UPDATE WAREA POINTER              00114001
000186 46C0 212E            0018E   231=COT05    BCT   R12,COT06               GOTO INS CODE TREATMENT IF ANY    00115001
00018A 47F0 222E            0028E   232=         B     COT12                   ALL INS CODES TREATED             00116001
                                    233=*                                                                        00117001
                                    234=*        INSERTION CODE TREATMENT                                        00118001
                                    235=*                                                                        00119001
                                    236=*        TEST ACTION PART OF INSERT CODE                                 00120001
                                    237=*                                                                        00121001
00018E 4190 000F            0000F   238=COT06    LA    R9,15                   LOAD REG TO ZERO HIGHORDER BITS   00122001
000192 1BAA                         239=         SR    R10,R10                                                   00123001
000194 1BBB                         240=         SR    R11,R11                                                   00124001
000196 91F0 6000      00000         241=         TM    0(R6),X'F0'                                               00125001
00019A 4710 215A            001BA   242=         BO    COT37                   GOTO 'INSERT BLANKS'              00126001
00019E 4780 2174            001D4   243=         BZ    COT30                   GOTO 'INSERT MESSAGE TEXT'        00127001
0001A2 9180 6000      00000         244=         TM    0(R6),X'80'                                               00128001
0001A6 4710 2190            001F0   245=         BO    COT07                   GOTO 'UNALTERED TEXT'             00129001
0001AA 9140 6000      00000         246=         TM    0(R6),X'40'                                               00130001
0001AE 4710 21A6            00206   247=         BO    COT10                   GOTO 'ALGOL SYMBOL'               00131001
0001B2 9120 6000      00000         248=         TM    0(R6),X'20'                                               00132001
0001B6 4710 220E            0026E   249=         BO    COT33                   GOTO 'INTERNAL CHARACTERS'        00133001
                                    250=*                                                                        00134001
                                    251=*        INSERTION OF BLANKS AT END OF PRTLIN                            00135001
                                    252=*                                                                        00136001
0001BA 4130 242A            0048A   253=COT37    LA    R3,WAREA+90             CALC FREE SPACE ON 1ST PRT LINE   00137001
0001BE 1B3E                         254=         SR    R3,R14                                                    00138001
0001C0 47D0 2188            001E8   255=         BNP   COT09                   BYPASS BLANKING IF LINE FULL      00139001
0001C4 9240 E000      00000         256=COT38    MVI   0(R14),C' '             INSERT BLANK                      00140001
0001C8 41E0 E001            00001   257=         LA    R14,1(,R14)             STEP WAREA POINTER                00141001
0001CC 4630 2164            001C4   258=         BCT   R3,COT38                BRANCH IF 1ST PRT LINE NOT FULL   00142001
0001D0 47F0 2188            001E8   259=         B     COT09                   GOTO NEXT INS CODE                00143001
                                    260=*                                                                        00144001
                                    261=*        INSERTION OF MESSAGE TEXT PART                                  00145001
                                    262=*                                                                        00146001
0001D4 43A0 6002            00002   263=COT30    IC    R10,2(,R6)                                                00147001
0001D8 41AA 7000            00000   264=         LA    R10,0(R10,R7)           GET ADDR OF TEXT PART             00148001
0001DC 43B0 6001            00001   265=         IC    R11,1(,R6)              GET L'TEXT PART                   00149001
0001E0 44B0 23AC            0040C   266=COT08    EX    R11,WMOVE1              MOVE TO WORKAREA                  00150001
0001E4 41EB E001            00001   267=COT35    LA    R14,1(R11,R14)          UPDATE WORKAREA POINTER           00151001
0001E8 4160 6003            00003   268=COT09    LA    R6,3(,R6)               UPDATE INS CODE POINTER           00152001
0001EC 47F0 2126            00186   269=         B     COT05                   GOTO NEXT INS CODE                00153001
                                    270=*                                                                        00154001
                                    271=*        UNALTERED TEXT                                                  00155001
                                    272=*                                                                        00156001
0001F0 43B0 5000            00000   273=COT07    IC    R11,0(,R5)              GET LENGTH OF SOURCE TEXT         00157001
0001F4 41A0 0005            00005   274=         LA    R10,5                                                     00158001
0001F8 1BBA                         275=         SR    R11,R10                                                   00159001
0001FA 4740 2188            001E8   276=         BM    COT09                   NO MOVE IF NO SOURCE TEXT         00160001
0001FE 41A0 5004            00004   277=         LA    R10,4(,R5)              GET ADDR OF SOURCE TEXT           00161001
000202 47F0 2180            001E0   278=         B     COT08                   MOVE TEXT, GOTO NEXT INS CODE     00162001
                                    279=*                                                                        00163001
                                    280=*        ALGOL SYMBOL                                                    00164001
                                    281=*                                                                        00165001
000206 9102 D082      00082         282=COT10    TM    COMPFLGS+2,SET60        60 CHARACTER SET USED ?           00166001
00020A 4710 21B6            00216   283=         BO    COT32                   YES, BRANCH                       00167001
00020E 41B0 263C            0069C   284=         LA    R11,WORDSISO            USE ISO TABLE                     00168001
000212 47F0 21BA            0021A   285=         B     COT32A                                                    00169001
                                    286=*                                                                        00170001
000216 41B0 2554            005B4   287=COT32    LA    R11,WORDSEBC            USE EBCDIC TABLE                  00171001
00021A 4130 25F6            00656   288=COT32A   LA    R3,WSYMBSTK             TABLE FOR STACK OPERATOR          00172001
00021E 43A0 6000            00000   289=         IC    R10,0(,R6)              GET ONE BYTE ALGOL SYMBOL         00173001
000222 14A9                         290=         NR    R10,R9                                                    00174001
000224 43AA 5000            00000   291=         IC    R10,0(R10,R5)                                             00175001
000228 42A0 23C0            00420   292=         STC   R10,WDEC                                                  00176001
00022C 9180 23C0      00420         293=         TM    WDEC,X'80'              SOURCE OPERATOR ?                 00177001
000230 4780 21E0            00240   294=         BZ    COT32B                  NO                                00178001
000234 4130 2598            005F8   295=         LA    R3,WSYMBSRC             YES, CHANGE TABLE                 00179001
000238 947F 23C0      00420         296=         NI    WDEC,X'7F'              REMOVE TAG                        00180001
00023C 43A0 23C0            00420   297=         IC    R10,WDEC                                                  00181001
000240 89A0 0001            00001   298=COT32B   SLL   R10,1                   MULTIPLY BY 2                     00182001
000244 48AA 3000            00000   299=         LH    R10,0(R10,R3)           CONVERT TO EBCDIC OR DISPLACMT    00183001
000248 4190 0100            00100   300=         LA    R9,256                  TEST KIND OF SYMBOL               00184001
00024C 15A9                         301=         CLR   R10,R9                                                    00185001
00024E 4740 2204            00264   302=         BL    COT11                   ONE CHARACTER SYMBOL              00186001
000252 41AA B000            00000   303=         LA    R10,0(R10,R11)          ADDR WORDS ENTRY                  00187001
000256 1BBB                         304=         SR    R11,R11                                                   00188001
000258 43B0 A000            00000   305=         IC    R11,0(,R10)             GET LENGTH OF SYMBOL              00189001
00025C 41A0 A001            00001   306=         LA    R10,1(,R10)             GET ADDR OF SYMBOL                00190001
000260 47F0 2180            001E0   307=         B     COT08                   MOVE SYMB, GOTO NEXT INS CODE     00191001
                                    308=*                                                                        00192001
000264 1BBB                         309=COT11    SR    R11,R11                 GET LENGTH-1 OF ONE-CHAR SYMBOL   00193001
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  Active USINGs: WORKAREA,R13  IEX60000,R2  IEX21000,R15

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000266 42A0 E000              00000   310=           STC   R10,0(,R14)          MOVE SYMBOL TO MSG AREA          00194001
00026A 47F0 2184              001E4   311=           B     COT35                GOTO NEXT INS CODE               00195001
                                      312=*                                                                      00196001
                                      313=*          INTERNAL CHARACTERS                                         00197001
                                      314=*                                                                      00198001
00026E 4190 0005              00005   315=COT33      LA    R9,5                                                  00199001
000272 43B0 5000              00000   316=           IC    R11,0(,R5)           GET NUMBER OF INT CHARACTERS-1   00200001
000276 1BB9                           317=           SR    R11,R9                                                00201001
000278 42B0 2225              00285   318=           STC   R11,COT34+1          STORE IT IN TRANSLATE INSTR      00202001
00027C 41A0 5004              00004   319=           LA    R10,4(,R5)           GET ADDR OF SOURCE TEXT          00203001
000280 44B0 23AC              0040C   320=           EX    R11,WMOVE1                                            00204001
000284 DC00 E000 2539 00000 00599     321=COT34      TR    0(0,R14),TRINTEXT    TRANSLATE                        00205001
00028A 47F0 2184              001E4   322=           B     COT35                UPDATE PTR, GOTO NEXT INS CODE   00206001
                                      323=*                                                                      00207001
                                      324=*          TRANSLATION AND OUTPUT OF MESSAGE                           00208001
                                      325=*                                                                      00209001
00028E 9180 2522        00582         326=COT12      TM    SWTO,X'80'           MESSAGE TO CONSOLE ?             00210001
000292 4710 2286              002E6   327=           BO    COT25                YES                              00211001
                                      328=*                                                                      00212001
                                      329=*          MESSAGE TO SYSPRINT                                         00213001
                                      330=*                                                                      00214001
000296 18BE                           331=COT16      LR    R11,R14                                               00215001
000298 4190 23E4              00444   332=           LA    R9,WAREA+20          GET L'MESSAGE TEXT               00216001
00029C 1BB9                           333=           SR    R11,R9                                                00217001
00029E 4190 0046              00046   334=           LA    R9,70                GET L'TEXT ON FIRST LINE         00218001
0002A2 1BB9                           335=           SR    R11,R9               SUBTRACT IT                      00219001
0002A4 4190 0059              00059   336=           LA    R9,89                GET L'PRINTLINE                  00220001
0002A8 41A0 23D0              00430   337=           LA    R10,WAREA            GET ADDR OF ERROR MESSAGE        00221001
0002AC 45F0 22E6              00346   338=           BAL   R15,COT27            OBTAIN OUTPUT BUFFER, BLANK IT   00222001
0002B0 12BB                           339=           LTR   R11,R11              L'MSG TXT > 70 ?                 00223001
0002B2 47B0 2258              002B8   340=           BNL   COT17                YES                              00224001
0002B6 1E9B                           341=           ALR   R9,R11               OBTAIN PRTLINE LENGTH IF < 90    00225001
0002B8 4490 23B2              00412   342=COT17      EX    R9,WMOVE3            MOVE FIRST PART OF ERROR MSG     00226001
0002BC 41A9 A001              00001   343=COT20      LA    R10,1(R9,R10)        INCREASE ADDR IN WORKAREA        00227001
0002C0 12BB                           344=           LTR   R11,R11              MORE TEXT TO BE MOVED ?          00228001
0002C2 47D0 22F6              00356   345=           BNH   COT21                NO                               00229001
0002C6 4190 0046              00046   346=           LA    R9,70                YES, GET L'NEXT PRTLINE          00230001
0002CA 1BB9                           347=           SR    R11,R9               SUBTRACT IT FROM REMAIN TXTLGT   00231001
0002CC 45F0 22E6              00346   348=           BAL   R15,COT27            OBTAIN OUTPUT BUFFER, BLANK IT   00232001
0002D0 12BB                           349=           LTR   R11,R11              LENGTH > 70 ?                    00233001
0002D2 47B0 2278              002D8   350=           BNL   COT19                YES                              00234001
0002D6 1E9B                           351=           ALR   R9,R11               OBTAIN LENGTH IF LESS THAN 70    00235001
0002D8 41F0 0001              00001   352=COT19      LA    R15,1                MODIFY LENGTH FOR MOVE INSTR     00236001
0002DC 1B9F                           353=           SR    R9,R15                                                00237001
0002DE 4490 23B8              00418   354=           EX    R9,WMOVE4            MOVE TEXT TO OUTPUT BUFFER       00238001
0002E2 47F0 225C              002BC   355=           B     COT20                PUT OUT NEXT TEXTLINE IF ANY     00239001
                                      356=*                                                                      00240001
                                      357=*          MESSAGE TO WTP                                              00241001
                                      358=*                                                                      00242001
0002E6 41B0 B028              00028   359=COT25      LA    R11,40(,R11)         GET LENGTH FOR MOVE INSTRUCTION  00243001
0002EA 44B0 22DC              0033C   360=           EX    R11,EXMVC                                             00244001
                                      361=*                                                                      00245001
                                      362=COT24      WTO   '                                                    X00246001
                                        =                     ',ROUTCDE=11,DESC=7   ISSUE WTP                    00247001
0002EE 0700                           363+           CNOP  0,4                                                   01-WTO
0002F0 4510 22DA              0033A   364+COT24      BAL   1,IHB0004A                         BRANCH AROUND MESSAGE  01-WTO
0002F4 0042                           365+           DC    AL2(66)         TEXT LENGTH                            01-WTO
0002F6 8000                           366+           DC    B'1000000000000000' MCS FLAGS                          01-WTO
0002F8 4040404040404040               367+           DC    C'                                                    +01-WTO
                                        +                      '                                                  01-WTO
000336 0200                           368+           DC    B'0000001000000000' DESCRIPTOR CODES                   01-WTO
000338 0020                           369+           DC    B'0000000000100000' ROUTING CODES                      01-WTO
00033A                                370+IHB0004A DS      0H                                                    01-WTO
00033A 0A23                           371+           SVC   35                                                    01-WTO
                                      372=*                                                                      00248001
00033C D200 2298 23D0 002F8 00430     373=EXMVC      MVC   COT24+8(0),WAREA     MOVE MESSAGE                     00249001
                                      374=*                                                                      00250001
000342 47F0 2396              003F6   375=           B     WDIRET2              TERMINATE                        00251001
                                      376=*                                                                      00252001
                                      377=*          OBTAIN OUTPUT BUFFER                                        00253001
                                      378=*                                                                      00254001
000346 90EF 2524              00584   379=COT27      STM   R14,R15,SVAR2        SAVE REGS FOR CALL OF PRINT RTN  00255001
00034A 58F0 D0B8              000B8   380=           L     R15,PRTRTADD         LOAD ADDR OF PRINT ROUTINE       00256001
00034E 05EF                           381=           BALR  R14,R15              CALL PRINT ROUTINE               00257001
000350 98EF 2524              00584   382=           LM    R14,R15,SVAR2        RESTORE REGS                     00258001
000354 07FF                           383=           BR    R15                                                   00259001
                                      384=*                                                                      00260001
                                      385=*          GOTO NEXT MESSAGE OR TERMINATE                              00261001
                                      386=*                                                                      00262001
000356 1B99                           387=COT21      SR    R9,R9                                                 00263001
000358 4390 5000              00000   388=           IC    R9,0(,R5)            GET L'TREATED ENTRY              00264001
00035C 1A59                           389=           AR    R5,R9                POINT TO NEXT ENTRY              00265001
00035E 5890 D0C0              000C0   390=           L     R9,NEXTERR           GET ADDR OF FIRST FREE ENTRY     00266001
000362 1959                           391=           CR    R5,R9                NEXT ENTRY = FIRST FREE ?        00267001
000364 4740 2056              000B6   392=           BL    COT01                NO, HANDLE NEXT ENTRY            00268001
000368 41A0 2396              003F6   393=           LA    R10,WDIRET2          LOAD NEW RETURN ADDR             00269001
00036C 50A0 D090              00090   394=           ST    R10,ERET                                              00270001
000370 58A0 D0BC              000BC   395=           L     R10,ERRPOOL          YES, POOL EXHAUSTED, ZERO PTR    00271001
000374 50A0 D0C0              000C0   396=           ST    R10,NEXTERR                                           00272001
000378 9108 D080        00080         397=           TM    COMPFLGS,TERR        TERMINATING ERROR ?              00273001
00037C 98EF 252C              0058C   398=COT28      LM    R14,R15,SVAR1        LOAD RETURN ADDR AND BASE        00274001
000380 4710 2326              00386   399=           BO    COT29                YES                              00275001
000384 07FE                           400=           BR    R14                  RETURN                           00276001
                                      401=*                                                                      00277001
                                      402=COT29      XCTL  EP=IEX51002          BRANCH TO TERMINATION            00278001
000386                                403+COT29      DS    0H                                                    01-XCTL
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

000386 0700                        404+         CNOP  0,4                                                02-IHBIN
000388 45F0 233C            0039C  405+         BAL   15,*+20           BRANCH AROUND CONSTANTS          02-IHBIN
00038C 00000394                    406+         DC    A(*+8)            ADDR. OF PARM. LIST              02-IHBIN
000390 00000000                    407+         DC    A(0)               DCB ADDRESS PARAMETER           02-IHBIN
000394 C9C5E7F5F1F0F0F2            408+         DC    CL8'IEX51002'      EP PARAMETER                    02-IHBIN
00039C 0A07                        409+         SVC   7                              ISSUE XCTL SVC      01-XCTL
                                   410=*                                                                 00279001
                                   411=*        ACTION TO BE PERFORMED AFTER I/O ERROR OR PROGRAM        00280001
                                   412=*        INTERRUPTION                                             00281001
                                   413=*                                                                 00282001
00039E 9180 D082      00082        414=WDIRET1  TM    COMPFLGS+2,PRT         SYSPRINT ERROR ?            00283001
0003A2 4780 234E            003AE  415=         BZ    COT18A                 NO                          00284001
0003A6 9680 2522      00582        416=COT18    OI    SWTO,X'80'             YES, SET SWITCH ON          00285001
0003AA 47F0 239E            003FE  417=         B     LAST                                               00286001
                                   418=*                                                                 00287001
0003AE 9108 D081      00081        419=COT18A   TM    COMPFLGS+1,ERR         PROGRAM INTERRUPT ?         00288001
0003B2 4780 239E            003FE  420=         BZ    LAST                   NO                          00289001
0003B6 4170 00D3            000D3  421=         LA    R7,211                 YES, GET MESSAGE NUMBER     00290001
0003BA 48A0 2520            00580  422=         LH    R10,MODNUMB            MODIFY IT                   00291001
0003BE 1B7A                        423=         SR    R7,R10                                             00292001
0003C0 8970 0002            00002  424=         SLL   R7,2                   GET ENTRY IN ADDR TABLE     00293001
0003C4 5890 251C            0057C  425=         L     R9,AWADDTAB                                        00294001
0003C8 1A79                        426=         AR    R7,R9                  GET ADDR OF MESSAGE         00295001
0003CA 5870 7000            00000  427=         L     R7,0(,R7)                                          00296001
0003CE 45F0 22E6            00346  428=         BAL   R15,COT27              GET PRINT BUFFER            00297001
0003D2 D213 1000 2504 00000 00564  429=         MVC   0(20,R1),CPI           MOVE MSG CODE ETC           00298001
0003D8 D232 1014 7000 00014 00000  430=         MVC   20(51,R1),0(R7)        MOVE MSG TEXT               00299001
0003DE 45F0 22E6            00346  431=         BAL   R15,COT27              GET PRINT BUFFER            00300001
0003E2 5890 D0C0            000C0  432=         L     R9,NEXTERR             GET ADDR OF PSW             00301001
0003E6 41A0 0010            00010  433=         LA    R10,16                                             00302001
0003EA 1B9A                        434=         SR    R9,R10                                             00303001
0003EC D20F 1014 9000 00014 00000  435=         MVC   20(16,R1),0(R9)        MOVE PSW                    00304001
0003F2 924B 1025      00025        436=         MVI   37(R1),C'.'            INSERT PERIOD               00305001
                                   437=*                                                                 00306001
0003F6 9680 D081      00081        438=WDIRET2  OI    COMPFLGS+1,NSRCE       SET BIT FOR TERMINATING ERROR  00307001
0003FA 47F0 2326            00386  439=         B     COT29                  BRANCH TO TERMINATION       00308001
                                   440=*                                                                 00309001
                                   441=*        HANDLE LAST ERROR PATTERN                                00310001
                                   442=*                                                                 00311001
0003FE 5850 D0C0            000C0  443=LAST     L     R5,NEXTERR             GET ADDR OF FIRST FREE ENTRY  00312001
000402 41A0 000C            0000C  444=         LA    R10,12                 GET ADDR OF LAST PATTERN    00313001
000406 1B5A                        445=         SR    R5,R10                                             00314001
000408 47F0 2056            000B6  446=         B     COT01                  GOTO NORMAL TREATMENT       00315001
                                   447=*                                                                 00316001
                                   448=*        WORKAREAS AND MOVE INSTRUCTIONS                          00317001
                                   449=*                                                                 00318001
00040C                             450=         CNOP  0,4                                                00319001
00040C D200 E000 A000 00000 00000  451=WMOVE1   MVC   0(0,R14),0(R10)                                    00320001
000412 D200 1000 A000 00000 00000  452=WMOVE3   MVC   0(0,R1),0(R10)                                     00321001
000418 D200 1014 A000 00014 00000  453=WMOVE4   MVC   20(0,R1),0(R10)                                    00322001
                                   454=*                                                                 00323001
00041E 0000
000420 0000000000000000            455=WDEC     DC    2D'0'                                              00324001
000430 C9C5E7F0F0F0C940            456=WAREA    DC    C'IEX000I  0  00000   '                            00325001
000444 4040404040404040            457=         DC    250C' '                                            00326001
                                   458=*                                                                 00327001
                                   459=*        HEADINGS AND MESSAGE 211 (PART OF)                       00328001
                                   460=*                                                                 00329001
00053E C4C9C1C7D5D6E2E3            461=HEADD1   DC    C'DIAGNOSTICS'                                     00330001
000549 C3D6C4C540404040            462=HEADD2   DC    C'CODE     SEV  SC      MESSAGE'                     00331001
                                   463=*                                                                 00332001
000564 C9C5E7F2F1F1C940            464=CPI      DC    C'IEX211I  T           ' FIRST PART OF MESSAGE 211  00333001
                                   465=*                                                                 00334001
                                   466=*        ADDRESSES AND CONSTANT                                   00335001
                                   467=*                                                                 00336001
000578 00000000                    468=AWEMPOOL DC    F'0'                   ADDR OF MESSAGE TEXTS       00337001
00057C 00000000                    469=AWADDTAB DC    F'0'                   ADDR OF ADDR TABLE          00338001
000580 0000                        470=MODNUMB  DC    H'0'                   MODIFICATION NUMBER         00339001
                                   471=*                                                                 00340001
                                   472=*        VARIOUS                                                  00341001
                                   473=*                                                                 00342001
000582 00                          474=SWTO     DC    X'00'                  SWITCH FOR OUTPUT ON CONSOLE  00343001
000583 00
000584 0000000000000000            475=SVAR2    DC    2F'0'                  TO SAVE LINKREGS FOR PRINT RTN  00344001
00058C 0000000000000000            476=SVAR1    DC    2F'0'                  TO SAVE RETURN ADDR AND BASE  00345001
000594 4040404040                  477=BLANKS   DC    CL5' '                                             00346001
                                   478=*                                                                 00347001
                                   479=*        TABLES FOR CONVERSION AND TRANSLATION                    00348001
                                   480=*                                                                 00349001
                                   481=*        TRANSLATE INTERNAL CHARS TO EBCDIC                       00350001
                                   482=*                                                                 00351001
000599 4E605C617B7B4D7A            483=TRINTEXT DC    C'+-*/##(:'            00 -> 07                    00352001
0005A1 AD7B7B5E7B7B7B7B            484=         DC    C'[##;####'            08 -> 0F                    00353001
0005A9 7E4C6E7B7B7B7B7B            485=         DC    C'=<>#####'            10 -> 17                    00354001
0005B1 7B7B7B7B7B7B7B7B            486=         DC    C'########'            18 -> 1F                    00355001
0005B9 5F7B4F507B6B5D7A            487=         DC    C'¬#|&&#,):'           20 -> 27                    00356001
0005C1 BD7B7B407B4B7D7B            488=         DC    C']## #.''#'           28 -> 2F                    00357001
0005C9 F0F1F2F3F4F5F6F7            489=         DC    C'01234567'            30 -> 37                    00358001
0005D1 F8F97B7B7B7B4B7D            490=         DC    C'89####.'''           38 -> 3F                    00359001
0005D9 C1C2C3C4C5C6C7C8            491=         DC    C'ABCDEFGH'            40 -> 47                    00360001
0005E1 C9D1D2D3D4D5D6D7            492=         DC    C'IJKLMNOP'            48 -> 4F                    00361001
0005E9 D8D9E2E3E4E5E6E7            493=         DC    C'QRSTUVWX'            50 -> 57                    00362001
0005F1 E8E95B6D7B7C                494=         DC    C'YZ$_#@'              58 -> 5D                    00363001
                                   495=*                                                                 00364001
                                   496=*                                                                 00365001
                                   497=*        CONVERSION OF SOURCE OPERATORS                           00366001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   498=*                                                                  00367001
0005F7 00
0005F8                             499=         DC    0F'0'                                               00368001
0005F8 00                          500=WSYMBSRC DC    X'00'               00        PLUS                  00369001
0005F9 4E                          501=         DC    C'+'                                                00370001
0005FA 00                          502=         DC    X'00'               01        MINUS                 00371001
0005FB 60                          503=         DC    C'-'                                                00372001
0005FC 00                          504=         DC    X'00'               02        MULTIPLY              00373001
0005FD 5C                          505=         DC    C'*'                                                00374001
0005FE 00                          506=         DC    X'00'               03        DIVIDE                00375001
0005FF 61                          507=         DC    C'/'                                                00376001
000600 0100                        508=         DC    H'256'              04        INTEGER DIVIDE        00377001
000602 0104                        509=         DC    H'260'              05        'POWER'               00378001
000604 00                          510=         DC    X'00'               06        LEFT PARENTHESIS      00379001
000605 4D                          511=         DC    C'('                                                00380001
000606 010C                        512=         DC    H'268'              07        COLON                 00381001
000608 010F                        513=         DC    H'271'              08        LEFT BRACKET          00382001
00060A 0112                        514=         DC    H'274'              09        'ARRAY'               00383001
00060C 011A                        515=         DC    H'282'              0A        'SWITCH'              00384001
00060E 0123                        516=         DC    H'291'              0B        SEMICOLON             00385001
000610 0126                        517=         DC    H'294'              0C        'BEGIN'               00386001
000612 0126                        518=         DC    H'294'              0D        'BEGIN'               00387001
000614 01D5                        519=         DC    H'469'              0E        'PROCEDURE'           00388001
000616 01D5                        520=         DC    H'469'              0F        'PROCEDURE'           00389001
000618 012E                        521=         DC    H'302'              10        'EQUAL'               00390001
00061A 0136                        522=         DC    H'310'              11        'LESS'                00391001
00061C 013D                        523=         DC    H'317'              12        'GREATER'             00392001
00061E 0147                        524=         DC    H'327'              13        'NOTEQUAL'            00393001
000620 0152                        525=         DC    H'338'              14        'NOTGREATER           00394001
000622 015F                        526=         DC    H'351'              15        'NOTLESS'             00395001
000624 0169                        527=         DC    H'361'              16        COLON EQUAL           00396001
000626 016C                        528=         DC    H'364'              17        'GOTO'                00397001
000628 0173                        529=         DC    H'371'              18        'FOR'                 00398001
00062A 0179                        530=         DC    H'377'              19        'STEP'                00399001
00062C 0180                        531=         DC    H'384'              1A        'UNTIL'               00400001
00062E 0188                        532=         DC    H'392'              1B        'WHILE'               00401001
000630 0190                        533=         DC    H'400'              1C        'DO'                  00402001
000632 0195                        534=         DC    H'405'              1D        'IF'                  00403001
000634 019A                        535=         DC    H'410'              1E        'THEN'                00404001
000636 01A1                        536=         DC    H'417'              1F        'ELSE'                00405001
000638 01A8                        537=         DC    H'424'              20        'NOT'                 00406001
00063A 01AE                        538=         DC    H'430'              21        'IMPL'                00407001
00063C 01B5                        539=         DC    H'437'              22        'OR'                  00408001
00063E 01BA                        540=         DC    H'442'              23        'AND'                 00409001
000640 01C0                        541=         DC    H'448'              24        'EQUIV'               00410001
000642 00                          542=         DC    X'00'               25        COMMA                 00411001
000643 6B                          543=         DC    C','                                                00412001
000644 00                          544=         DC    X'00'               26        RIGHT PARENTHESIS     00413001
000645 5D                          545=         DC    C')'                                                00414001
000646 010C                        546=         DC    H'268'              27        COLON                 00415001
000648 01C8                        547=         DC    H'456'              28        RIGHT SUBSCRIPT BRACK 00416001
00064A 0123                        548=         DC    H'291'              29        DELTA                 00417001
00064C 01CB                        549=         DC    H'459'              2A        'END'                 00418001
00064E 0123                        550=         DC    H'291'              2B        ETA                   00419001
000650 01CB                        551=         DC    H'459'              2C        'END'                 00420001
000652 00                          552=         DC    X'00'               2D        OMEGA                 00421001
000653 40                          553=         DC    C' '                                                00422001
000654 01E1                        554=         DC    H'481'              2E        'CODE'                00423001
                                   555=*                                                                  00424001
                                   556=*        CONVERSION OF STACK OPERATORS                             00425001
                                   557=*                                                                  00426001
000656 00                          558=WSYMBSTK DC    X'00'               00        PLUS                  00427001
000657 4E                          559=         DC    C'+'                                                00428001
000658 00                          560=         DC    X'00'               01        MINUS                 00429001
000659 60                          561=         DC    C'-'                                                00430001
00065A 00                          562=         DC    X'00'               02        MULTIPLY              00431001
00065B 5C                          563=         DC    C'*'                                                00432001
00065C 00                          564=         DC    X'00'               03        DIVIDE                00433001
00065D 61                          565=         DC    C'/'                                                00434001
00065E 0100                        566=         DC    H'256'              04        INTEGER DIVIDE        00435001
000660 0104                        567=         DC    H'260'              05        'POWER'               00436001
000662 00                          568=         DC    X'00'               06        LEFT PARENTHESIS      00437001
000663 4D                          569=         DC    C'('                                                00438001
000664 010C                        570=         DC    H'268'              07        COLON                 00439001
000666 010F                        571=         DC    H'271'              08        LEFT BRACKET          00440001
000668 0112                        572=         DC    H'274'              09        'ARRAY'               00441001
00066A 011A                        573=         DC    H'282'              0A        'SWITCH'              00442001
00066C 0123                        574=         DC    H'291'              0B        SEMICOLON             00443001
00066E 0126                        575=         DC    H'294'              0C        'BEGIN'               00444001
000670 0126                        576=         DC    H'294'              0D        'BEGIN'               00445001
000672 01D5                        577=         DC    H'469'              0E        'PROCEDURE'           00446001
000674 01D5                        578=         DC    H'469'              0F        'PROCEDURE'           00447001
000676 012E                        579=         DC    H'302'              10        'EQUAL'               00448001
000678 0136                        580=         DC    H'310'              11        'LESS'                00449001
00067A 013D                        581=         DC    H'317'              12        'GREATER'             00450001
00067C 0147                        582=         DC    H'327'              13        'NOTEQUAL'            00451001
00067E 0152                        583=         DC    H'338'              14        'NOTGREATER           00452001
000680 015F                        584=         DC    H'351'              15        'NOTLESS'             00453001
000682 0169                        585=         DC    H'361'              16        COLON EQUAL           00454001
000684 016C                        586=         DC    H'364'              17        'GOTO'                00455001
000686 0173                        587=         DC    H'371'              18        'FOR'                 00456001
000688 0179                        588=         DC    H'377'              19        'STEP'                00457001
00068A 0180                        589=         DC    H'384'              1A        'UNTIL'               00458001
00068C 0188                        590=         DC    H'392'              1B        'WHILE'               00459001
00068E 0190                        591=         DC    H'400'              1C        'DO'                  00460001
000690 0195                        592=         DC    H'405'              1D        'IF'                  00461001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                               X390 3.1.04  2012/08/17 13.13

000692 019A                        593=         DC    H'410'             1E        'THEN'              00462001
000694 01A1                        594=         DC    H'417'             1F        'ELSE'              00463001
000696 01A8                        595=         DC    H'424'             20        'NOT'               00464001
000698 01AE                        596=         DC    H'430'             21        'IMPL'              00465001
00069A 01B5                        597=         DC    H'437'             22        'OR'                00466001
00069C 01BA                        598=         DC    H'442'             23        'AND'               00467001
00069E 01C0                        599=         DC    H'448'             24        'EQUIV'             00468001
0006A0 00                          600=         DC    X'00'              25        ALPHA               00469001
0006A1 40                          601=         DC    C' '                                             00470001
0006A2 0195                        602=         DC    H'405'             26        IFS                 00471001
0006A4 019A                        603=         DC    H'410'             27        THENS               00472001
0006A6 01A1                        604=         DC    H'417'             28        ELSES               00473001
0006A8 00                          605=         DC    X'00'              29        LEFT PARENTHESIS    00474001
0006A9 4D                          606=         DC    C'('                                             00475001
0006AA 00                          607=         DC    X'00'              2A        LEFT PARENTHESIS    00476001
0006AB 4D                          608=         DC    C'('                                             00477001
0006AC 00                          609=         DC    X'00'              2B        MONADIC MINUS       00478001
0006AD 60                          610=         DC    C'-'                                             00479001
0006AE 010F                        611=         DC    H'271'             2C        LEFT SUBSCRIPT BRACKET 00480001
0006B0 0169                        612=         DC    H'361'             2D        COLON EQUAL         00481001
0006B2 0169                        613=         DC    H'361'             2E        COLON EQUAL         00482001
                                   614=*                                                               00483001
                                   615=*        COMPOUND ALGOL SYMBOLS, EBCDIC                         00484001
                                   616=*                                                               00485001
0006B4                             617=         DC    0F'0'                                            00486001
                     005B4         618=WORDSEBC EQU   *-256                                            00487001
0006B4 02                          619=         DC    X'02'              256       INTEGER DIVIDE      00488001
0006B5 7D617D                      620=         DC    C'''/'''                                         00489001
0006B8 01                          621=         DC    X'01'              260       POWER               00490001
0006B9 5C5C4040404040              622=         DC    C'**     '                                       00491001
0006C0 00                          623=         DC    X'00'              268       COLON               00492001
0006C1 7A40                        624=         DC    C': '                                            00493001
0006C3 01                          625=         DC    X'01'              271       LEFT BRACKET        00494001
0006C4 4D61                        626=         DC    C'(/'                                            00495001
0006C6 06                          627=         DC    X'06'              274       'ARRAY'             00496001
0006C7 7DC1D9D9C1E87D              628=         DC    C'''ARRAY'''                                     00497001
0006CE 07                          629=         DC    X'07'              282       'SWITCH'            00498001
0006CF 7DE2E6C9E3C3C87D            630=         DC    C'''SWITCH'''                                    00499001
0006D7 00                          631=         DC    X'00'              291       SEMICOLON           00500001
0006D8 5E40                        632=         DC    C'; '                                            00501001
0006DA 06                          633=         DC    X'06'              294       'BEGIN'             00502001
0006DB 7DC2C5C7C9D57D              634=         DC    C'''BEGIN'''                                     00503001
0006E2 00                          635=         DC    X'00'              302       EQUAL               00504001
0006E3 7E404040404040              636=         DC    C'=      '                                       00505001
0006EA 00                          637=         DC    X'00'              310       LESSTHAN            00506001
0006EB 4C4040404040                638=         DC    C'<     '                                        00507001
0006F1 00                          639=         DC    X'00'              317       GREATER THAN        00508001
0006F2 6E40404040404040            640=         DC    C'>       '                                      00509001
0006FB 01                          641=         DC    X'01'              327       NOT EQUAL           00510001
0006FC 5F7E404040404040            642=         DC    C'¬=      '                                      00511001
000706 01                          643=         DC    X'01'              338       LESS THAN OR EQU    00512001
000707 4C7E404040404040            644=         DC    C'<=       '                                     00513001
000713 01                          645=         DC    X'01'              351       GR THAN OR EQU      00514001
000714 6E7E404040404040            646=         DC    C'>=      '                                      00515001
00071D 01                          647=         DC    X'01'              361       COLON EQUAL         00516001
00071E 7A7E                        648=         DC    C':='                                            00517001
000720 05                          649=         DC    X'05'              364       'GOTO'              00518001
000721 7DC7D6E3D67D                650=         DC    C'''GOTO'''                                      00519001
000727 04                          651=         DC    X'04'              371       'FOR'               00520001
000728 7DC6D6D97D                  652=         DC    C'''FOR'''                                       00521001
00072D 03                          653=         DC    X'03'              377       'STEP'              00522001
00072E 7DE2E3C5D77D                654=         DC    C'''STEP'''                                      00523001
000734 06                          655=         DC    X'06'              384       'UNTIL'             00524001
000735 7DE4D5E3C9D37D              656=         DC    C'''UNTIL'''                                     00525001
00073C 06                          657=         DC    X'06'              392       'WHILE'             00526001
00073D 7DE6C8C9D3C57D              658=         DC    C'''WHILE'''                                     00527001
000744 03                          659=         DC    X'03'              400       'DO'                00528001
000745 7DC4D67D                    660=         DC    C'''DO'''                                        00529001
000749 03                          661=         DC    X'03'              405       'IF'                00530001
00074A 7DC9C67D                    662=         DC    C'''IF'''                                        00531001
00074E 05                          663=         DC    X'05'              410       'THEN'              00532001
00074F 7DE3C8C5D57D                664=         DC    C'''THEN'''                                      00533001
000755 05                          665=         DC    X'05'              417       'ELSE'              00534001
000756 7DC5D3E2C57D                666=         DC    C'''ELSE'''                                      00535001
00075C 00                          667=         DC    X'00'              424       NOT                 00536001
00075D 5F40404040                  668=         DC    C'¬    '                                         00537001
000762 05                          669=         DC    X'05'              430       'IMPL'              00538001
000763 7DC9D4D7D37D                670=         DC    C'''IMPL'''                                      00539001
000769 00                          671=         DC    X'00'              437       OR                  00540001
00076A 4F404040                    672=         DC    C'|   '                                          00541001
00076E 00                          673=         DC    X'00'              442       AND                 00542001
00076F 5040404040                  674=         DC    C'&&    '                                        00543001
000774 06                          675=         DC    X'06'              448       'EQUIV'             00544001
000775 7DC5D8E4C9E57D              676=         DC    C'''EQUIV'''                                     00545001
00077C 01                          677=         DC    X'01'              456       RIGHT BRACKET       00546001
00077D 615D                        678=         DC    C'/)'                                            00547001
00077F 04                          679=         DC    X'04'              459       'END'               00548001
000780 7DC5D5C47D                  680=         DC    C'''END'''                                       00549001
000785 02                          681=         DC    X'02'              465       LEFT STRINGQUOTE    00550001
000786 7D4D7D                      682=         DC    C'''('''                                         00551001
000789 0A                          683=         DC    X'0A'              469       'PROCEDURE'         00552001
00078A 7DD7D9D6C3C5C4E4            684=         DC    C'''PROCEDURE'''                                 00553001
000795 05                          685=         DC    X'05'              481       'CODE'              00554001
000796 7DC3D6C4C57D                686=         DC    C'''CODE'''                                      00555001
                                   687=*                                                               00556001
00079C                             688=         DS    0F                                               00557001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                       X390 3.1.04  2012/08/17 13.13

                      0069C         689=WORDSISO EQU   *-256              LIST OF COMPOUND ALGOL SYMBOLS, ISO  00558001
00079C 02                           690=         DC    X'02'                  256       INTEGER DIVIDE          00559001
00079D 7D617D                       691=         DC    C'''/'''                                                 00560001
0007A0 06                           692=         DC    X'06'                  260       'POWER'                 00561001
0007A1 7DD7D6E6C5D97D               693=         DC    C'''POWER'''                                             00562001
0007A8 01                           694=         DC    X'01'                  268       COLON                   00563001
0007A9 4B4B                         695=         DC    C'..'                                                    00564001
0007AB 01                           696=         DC    X'01'                  271       LEFT BRACKET            00565001
0007AC 4D61                         697=         DC    C'(/'                                                    00566001
0007AE 06                           698=         DC    X'06'                  274       'ARRAY'                 00567001
0007AF 7DC1D9D9C1E87D               699=         DC    C'''ARRAY'''                                             00568001
0007B6 07                           700=         DC    X'07'                  282       'SWITCH'                00569001
0007B7 7DE2E6C9E3C3C87D             701=         DC    C'''SWITCH'''                                            00570001
0007BF 01                           702=         DC    X'01'                  291       SEMICOLON               00571001
0007C0 4B6B                         703=         DC    C'.,'                                                    00572001
0007C2 06                           704=         DC    X'06'                  294       'BEGIN'                 00573001
0007C3 7DC2C5C7C9D57D               705=         DC    C'''BEGIN'''                                             00574001
0007CA 06                           706=         DC    X'06'                  302       'EQUAL'                 00575001
0007CB 7DC5D8E4C1D37D               707=         DC    C'''EQUAL'''                                             00576001
0007D2 05                           708=         DC    X'05'                  310       'LESS'                  00577001
0007D3 7DD3C5E2E27D                 709=         DC    C'''LESS'''                                              00578001
0007D9 08                           710=         DC    X'08'                  317       'GREATER'               00579001
0007DA 7DC7D9C5C1E3C5D9             711=         DC    C'''GREATER'''                                           00580001
0007E3 09                           712=         DC    X'09'                  327       'NOTEQUAL'              00581001
0007E4 7DD5D6E3C5D8E4C1             713=         DC    C'''NOTEQUAL'''                                          00582001
0007EE 0B                           714=         DC    X'0B'                  338       'NOTGREATER'            00583001
0007EF 7DD5D6E3C7D9C5C1             715=         DC    C'''NOTGREATER'''                                        00584001
0007FB 08                           716=         DC    X'08'                  351       'NOTLESS'               00585001
0007FC 7DD5D6E3D3C5E2E2             717=         DC    C'''NOTLESS'''                                           00586001
000805 01                           718=         DC    X'01'                  361       COLON EQUAL             00587001
000806 4B7E                         719=         DC    C'.='                                                    00588001
000808 05                           720=         DC    X'05'                  364       'GOTO'                  00589001
000809 7DC7D6E3D67D                 721=         DC    C'''GOTO'''                                              00590001
00080F 04                           722=         DC    X'04'                  371       'FOR'                   00591001
000810 7DC6D6D97D                   723=         DC    C'''FOR'''                                               00592001
000815 03                           724=         DC    X'03'                  377       'STEP'                  00593001
000816 7DE2E3C5D77D                 725=         DC    C'''STEP'''                                              00594001
00081C 06                           726=         DC    X'06'                  384       'UNTIL'                 00595001
00081D 7DE4D5E3C9D37D               727=         DC    C'''UNTIL'''                                             00596001
000824 06                           728=         DC    X'06'                  392       'WHILE'                 00597001
000825 7DE6C8C9D3C57D               729=         DC    C'''WHILE'''                                             00598001
00082C 03                           730=         DC    X'03'                  400       'DO'                    00599001
00082D 7DC4D67D                     731=         DC    C'''DO'''                                                00600001
000831 03                           732=         DC    X'03'                  405       'IF'                    00601001
000832 7DC9C67D                     733=         DC    C'''IF'''                                                00602001
000836 05                           734=         DC    X'05'                  410       'THEN'                  00603001
000837 7DE3C8C5D57D                 735=         DC    C'''THEN'''                                              00604001
00083D 05                           736=         DC    X'05'                  417       'ELSE'                  00605001
00083E 7DC5D3E2C57D                 737=         DC    C'''ELSE'''                                              00606001
000844 04                           738=         DC    X'04'                  424       'NOT'                   00607001
000845 7DD5D6E37D                   739=         DC    C'''NOT'''                                               00608001
00084A 05                           740=         DC    X'05'                  430       'IMPL'                  00609001
00084B 7DC9D4D7D37D                 741=         DC    C'''IMPL'''                                              00610001
000851 03                           742=         DC    X'03'                  437       'OR'                    00611001
000852 7DD6D97D                     743=         DC    C'''OR'''                                                00612001
000856 04                           744=         DC    X'04'                  442       'AND'                   00613001
000857 7DC1D5C47D                   745=         DC    C'''AND'''                                               00614001
00085C 06                           746=         DC    X'06'                  448       'EQUIV'                 00615001
00085D 7DC5D8E4C9E57D               747=         DC    C'''EQUIV'''                                             00616001
000864 01                           748=         DC    X'01'                  456       RIGHT BRACKET           00617001
000865 615D                         749=         DC    C'/)'                                                    00618001
000867 04                           750=         DC    X'04'                  459       'END'                   00619001
000868 7DC5D5C47D                   751=         DC    C'''END'''                                               00620001
00086D 02                           752=         DC    X'02'                  465       LEFT STRINGQUOTE        00621001
00086E 7D4D7D                       753=         DC    C'''('''                                                 00622001
000871 0A                           754=         DC    X'0A'                  469       'PROCEDURE'             00623001
000872 7DD7D9D6C3C5C4E4             755=         DC    C'''PROCEDURE'''                                         00624001
00087D 05                           756=         DC    X'05'                  481       'CODE'                  00625001
00087E 7DC3D6C4C57D                 757=         DC    C'''CODE'''                                              00626001
                                    758=*                                                                       00627001
                                    759=*        END OF IEX60000                                                00628001
                                    760=*                                                                       00629001
                                    761 *                                                                       00105001
000000                00000 00CB6   762 WORKAREA DSECT                                                          00106001
                                    763 *                                                                       00107001
                                    764          COPY  WORKAREA                                                 00108001
                                    765=*                                                                       00001001
                                    766=*        WORKAREA - MAPPING CSECT IEX00001                              00002001
                                    767=*                                                                       00003001
                                    768=*        ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT   00004001
                                    769=*                                                                       00005001
000000 0000000000000000             770=SAVEAREA DC    18F'0'                                                   00006001
                                    771=*                                                                       00007001
                                    772=*        DCB ADDRS                                                      00008001
                                    773=*                                                                       00009001
000048                              774=DCBTABLE DC    0F'0'                                                    00010001
000048 00000000                     775=ALINDCB  DC    A(0)                                                     00011001
00004C 00000000                     776=         DC    A(0)                                                     00012001
000050 00000000                     777=         DC    A(0)                                                     00013001
000054 00000000                     778=         DC    A(0)                                                     00014001
000058 00000000                     779=ASYSDCB  DC    A(0)                                                     00015001
00005C 00000000                     780=APRTDCB  DC    A(0)                                                     00016001
000060 00000000                     781=APCHDCB  DC    A(0)                                                     00017001
000064 00000000                     782=AUT1DCB  DC    A(0)                                                     00018001
000068 00000000                     783=AUT2DCB  DC    A(0)                                                     00019001
00006C 00000000                     784=AUT3DCB  DC    A(0)                                                     00020001
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

                                    785=*                                                                         00021001
                                    786=*        END OF DATA EXIT ADDRS                                           00022001
                                    787=*                                                                         00023001
000070 00000000                     788=EODUT1   DC    A(0)                 SYSUT1                                00024001
000074 00000000                     789=EODUT2   DC    A(0)                 SYSUT2                                00025001
000078 00000000                     790=EODUT3   DC    A(0)                 SYSUT3                                00026001
00007C 00000000                     791=EODIN    DC    A(0)                 SYSIN                                 00027001
                                    792=*                                                                         00028001
                                    793=*        OPTION SWITCHES IN COMPFLGS                                      00029001
                                    794=*                                                                         00030001
                                    795=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -                    00031001
                                    796=*                                                                         00032001
                                    797=*        PURPOSE                   POSITION                               00033001
                                    798=*                                  BYTE 1    BYTE 2    BYTE 3             00034001
                                    799=*                                  01234567  01234567  01234567           00035001
                                    800=*                                                                         00036001
                                    801=*        COMPMODE (SYNTAX CHECK)   X                                      00037001
                                    802=*        SUBSCRIPT OPTIMIZATION     X                                     00038001
                                    803=*        WARNING ERROR               X                                    00039001
                                    804=*        SERIOUS ERROR                X                                   00040001
                                    805=*        TERMINATING ERROR             X                                  00041001
                                    806=*        PROCEDURE/PROGRAM              X                                 00042001
                                    807=*        LONG/SHORT PRECISION            X                                00043001
                                    808=*        OPERAND                          X                               00044001
                                    809=*                                                                         00045001
                                    810=*        NOSOURCE/SOURCE                     X                            00046001
                                    811=*        NOLOAD/LOAD                          X                           00047001
                                    812=*        NODECK/DECK                           X                          00048001
                                    813=*        ISO/EBCDIC                             X                         00049001
                                    814=*        PROGRAM INTERRUPT                       X                        00050001
                                    815=*        TERMINATING PHASE ENTERED                X                       00051001
                                    816=*        NO BUFFERS ASSIGNED                       X                      00052001
                                    817=*        NO COMPILATION POSSIBLE                    X                     00053001
                                    818=*                                                                         00054001
                                    819=*        SYSPRINT DOWN                                 X                  00055001
                                    820=*        WHOLE SOURCE PROG IN CORE                      X                 00056001
                                    821=*        NO OPTAB                                        X                00057001
                                    822=*        SYSPRINT NOT OPENED                              X               00058001
                                    823=*        ERROR UNRELATED TO SEMICOLON NR                   X              00059001
                                    824=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)     X             00060001
                                    825=*        60 CHARACTER SET                                    X            00061001
                                    826=*        (RESERVED)                                           X           00062001
                                    827=*                                                                         00063001
000080 00220000                     828=COMPFLGS DC    X'00220000'          PARAMETERS AND SWITCHES               00064001
                                    829=*                                                                         00065001
                                    830=*        OPTION SWITCHES IN COMPFLGS                                      00066001
                                    831=*                                                                         00067001
                      00080         832=COMPMODE EQU   X'80'                SYNTAX CHECK MODE                     00068001
                      00040         833=SUBSCOPT EQU   X'40'                SUBSCRIPT OPTIMIZATION                00069001
                      000FB         834=PGR      EQU   X'FB'                                                      00070001
                      00004         835=PROC     EQU   X'04'                PRECOMPILED PROCEDURE                 00071001
                                    836=*                                                                         00072001
                      000FD         837=SHRT     EQU   X'FD'                                                      00073001
                      00002         838=LNG      EQU   X'02'                                                      00074001
                      00001         839=OPERAND  EQU   X'01'                                                      00075001
                                    840=*                                                                         00076001
                                    841=*        ERROR SEVERITY INDICATORS IN COMPFLGS                            00077001
                                    842=*                                                                         00078001
                      00020         843=WERR     EQU   X'20'                WARNING ERROR                         00079001
                      00010         844=SERR     EQU   X'10'                SERIOUS ERROR                         00080001
                      00008         845=TERR     EQU   X'08'                TERMINATING ERROR                     00081001
                                    846=*                                                                         00082001
                                    847=*        OPTION SWITCHES IN COMPFLGS+1                                    00083001
                                    848=*                                                                         00084001
                      0007F         849=SRCE     EQU   X'7F'                                                      00085001
                      00080         850=NSRCE    EQU   X'80'                                                      00086001
                                    851=*                                                                         00087001
                      000BF         852=LOAD     EQU   X'BF'                                                      00088001
                      00040         853=NLOAD    EQU   X'40'                                                      00089001
                                    854=*                                                                         00090001
                      000DF         855=DECK     EQU   X'DF'                                                      00091001
                      00020         856=NDECK    EQU   X'20'                                                      00092001
                                    857=*                                                                         00093001
                      000EF         858=EBCDIC   EQU   X'EF'                                                      00094001
                      00010         859=ISO      EQU   X'10'                                                      00095001
                                    860=*                                                                         00096001
                                    861=*        TERMINATION SWITCHES IN COMPFLGS+1                               00097001
                                    862=*                                                                         00098001
                      00008         863=ERR      EQU   X'08'                PROGRAM INTERRUPT HAS                 00099001
                                    864=*                                   OCCURED IN COMPILER                   00100001
                      00004         865=TERM     EQU   X'04'                LAST PHASE HAS BEEN ENTERED           00101001
                      00002         866=NOBUF    EQU   X'02'                ERROR POOL IS IN WORKAREA             00102001
                                    867=*                                   NO SCE PROG BUFF 1                    00103001
                      00001         868=NOGO     EQU   X'01'                COMPILATION NOT POSSIBLE              00104001
                                    869=*                                   DO NOT START SCAN 1                   00105001
                      00003         870=NOBUNOGO EQU   X'03'                NOBUF AND NOGO                        00106001
                                    871=*                                                                         00107001
                                    872=*        SWITCHES IN COMPFLGS+2                                           00108001
                                    873=*                                                                         00109001
                      00080         874=PRT      EQU   X'80'                SYSPRINT NOT AVAILABLE                00110001
                      00040         875=SPIC     EQU   X'40'                SOURCE PROGRAM IN STORAGE             00111001
                      00020         876=NOPT     EQU   X'20'                NO SUBSCRIPT OPTIMIZATION             00112001
                      00010         877=PRTNO    EQU   X'10'                SYSPRINT NOT OPENED                   00113001
                      00008         878=NOSC     EQU   X'08'                SEMICOLON COUNTER NOT VALID           00114001
                                    879=*                                                                         00115001
                      00004         880=NOTEST   EQU   X'04'                                                      00116001
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D-Loc  Object Code       Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

                         000FB          881=TEST     EQU   X'FB'               EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                        882=*                                                                   00118001
                         00002          883=SET60    EQU   X'02'               60 CHARACTER SET IS TO BE USED   00119001
                                        884=*                                                                   00120001
                                        885=*        MISCELLANEOUS CONTROL INFORMATION                          00121001
                                        886=*                                                                   00122001
000084 0000B000                         887=SIZE     DC    F'45056'        AVAILABLE MAIN STORAGE - NOT USED    00123001
000088 00000000                         888=PICAADD  DC    A(0)            ADDR OF PICA OF THE INVOKER          00124001
00008C 00000000                         889=HDING    DC    F'0'            ADDR OF HEADING INFO OF THE INVOKER  00125001
000090 00000000                         890=ERET     DC    F'0'            RETURN ADDR FOR PROGRAM              00126001
                                        891=*                              AND I/O ERRORS                       00127001
000094 0000000C                         892=PAGECNT  DC    PL4'0'          PAGE COUNT                           00128001
000098 0000                             893=LINCNT   DC    H'0'            COUNTER OF LINES PER PAGE            00129001
00009A 0038                             894=MAXLINES DC    H'56'           MAX NUMBER OF PRINT LINES PER PAGE   00130001
00009C 0000                             895=SEMCNT   DC    H'0'            SEMICOLON COUNTER                    00131001
00009E 0032                             896=PBN      DC    H'50'           HIGHEST PROGRAM BLOCK NUMBER         00132001
0000A0 0000                             897=KBN      DC    H'0'            HIGHEST CONSTANT POOL NUMBER         00133001
                         0001C          898=LATNR    EQU   28              NR OF LIBRARY STAND FUNCTIONS        00134001
                         0006C          899=LATBEG   EQU   4*(LATNR-1)                                          00135001
0000A2 006C                             900=LN       DC    AL2(LATBEG)     LAST USED DISPLACEMENT IN LAT        00136001
0000A4 00000000                         901=PRPT     DC    F'0'            PROGRAM POINTER                      00137001
0000A8 00000000                         902=SAVOUTA  DC    F'0'                                                 00138001
0000AC                                  903=OUTAREA2 DS    F               SYSPUNCH SAVE AREA                   00139001
0000B0 40404040                         904=PIDENT   DC    CL4' '          PROGRAM IDENTIFICATION               00140001
0000B4 0000000C                         905=CARDCNT  DC    PL4'0'          OBJECT PROGRAM DECK SEQUENCE NUMBER  00141001
0000B8 00000000                         906=PRTRTADD DC    A(0)            ADDR OF PRINT ROUTINE                00142001
                                        907=*                                                                   00143001
                                        908=*        ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE  00144001
                                        909=*                                                                   00145001
0000BC 00000278                         910=ERRPOOL  DC    A(PRELPOOL)     FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                         911=NEXTERR  DC    A(PRELPOOL)     NEXT FREE PLACE IN ERROR POOL        00147001
0000C4                                  912=ENDPOOL  DS    F               LAST BYTE OF ERROR POOL-23           00148001
0000C8                                  913=SRCE1ADD DS    F               SOURCE PROGRAM BUFFER 1              00149001
0000CC                                  914=SRCE1END DS    F               ADDR OF LAST BYTE+1                  00150001
0000D0                                  915=SULTSTRT DS    F               ID OF LAST ITAB RECORD               00151001
                                        916=*                                                                   00152001
                                        917=*                                                                   00153001
                                        918=*        TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                00154001
                                        919=*                                                                   00155001
0000D4                                  920=INBLKS   DS    H               MAX BLKSIZE FOR SYSIN     - NOT USED 00156001
0000D6                                  921=PRTBLKS  DS    H               MAX BLKSIZE SYSPRINT      - NOT USED 00157001
0000D8                                  922=LINBLKS  DS    H               MAX BLKSIZE FOR SYSLIN    - NOT USED 00158001
0000DA                                  923=PCHBLKS  DS    H               MAX BLKSIZE FOR SYSPUNCH - NOT USED  00159001
0000DC                                  924=POOLS    DS    F               SIZE OF ERROR POOL                   00160001
0000E0                                  925=SRCE1S   DS    F               SIZE OF SOURCE PROG BUFFERS 1 AND 2  00161001
                         000E0          926=SRCE3S   EQU   SRCE1S          SIZE OF SOURCE PROG BUFFERS 3 AND 4  00162001
0000E4                                  927=ITAB10S  DS    F               SIZE OF ITAB FOR PHASE 10            00163001
0000E8                                  928=ITAB20S  DS    F               SIZE OF ITAB FOR PHASE 20            00164001
0000EC                                  929=ITAB30S  DS    F               SIZE OF ITAB FOR PHASE 30            00165001
0000F0                                  930=CRIDTABS DS    F               SIZE OF CRIDTAB FOR PHASE 30         00166001
0000F4                                  931=SUTAB30S DS    F               SIZE OF SUTAB BUFFER OF PHASE 30     00167001
0000F8                                  932=LVTAB30S DS    F               SIZE OF LVTAB BUFFER FOR PHASE 30    00168001
0000FC                                  933=OPTABS   DS    F               SIZE OF OPTAB BUFFERS 1 AND 2        00169001
000100                                  934=SUTAB40S DS    F               SIZE OF SUTAB IN PHASE 40            00170001
000104                                  935=LVTAB40S DS    F               SIZE OF LVTAB IN PHASE 40            00171001
000108                                  936=OOSTACKS DS    F               SIZE OF OPERATOR/OPERAND STACK       00172001
                                        937=*                                                                   00173001
                                        938=*        AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF       00174001
                                        939=*        EACH NEW PAGE                                              00175001
                                        940=*                                                                   00176001
                         0010C          941=PAGEHEAD EQU   *                                                    00177001
00010C 4040404040404040                 942=PAGEHD1  DC    CL121' '             FIRST HEADLINE                  00178001
000185                   00185 0010C    943=         ORG   PAGEHD1                                              00179001
00010C F1                               944=PAGEHD1C DC    C'1'                 ASA CNTL                        00180001
00010D 4040404040404040                 945=         DC    CL10' '              SPACER                          00181001
000117 4040404040404040                 946=PAGEHD1D DC    CL100' '             PAGE TEXT HEADING               00182001
00017B                   0017B 0017D    947=         ORG   PAGEHD1+113                                          00183001
00017D D7C1C7C5                         948=PAGEHD1P DC    CL4'PAGE'            PAGE                            00184001
000181 40404040                         949=PAGENUMB DC    CL4' '               PAGE COUNTER                    00185001
000185                   00185 00185    950=         ORG                                                        00186001
                                        951=*                                                                   00187001
000185 4040404040404040                 952=PAGEHD2  DC    CL121' '             SECOND HEADLINE                 00188001
0001FE                   001FE 00185    953=         ORG   PAGEHD2                                              00189001
000185 40                               954=PAGEHD2C DC    C' '                 ASA CNTL                        00190001
000186 4040404040404040                 955=         DC    CL10' '              SPACER                          00191001
000190 4040404040404040                 956=PAGEHD2D DC    CL100' '             PAGE TEXT HEADING               00192001
0001F4                   001F4 001FE    957=         ORG                                                        00193001
                                        958=*                                                                   00194001
0001FE 4040404040404040                 959=PAGEHD3  DC    CL121' '             THIRD HEADLINE                  00195001
000277                   00277 001FE    960=         ORG   PAGEHD3                                              00196001
0001FE 40                               961=PAGEHD3C DC    C' '                 ASA CNTL                        00197001
0001FF 4040404040404040                 962=         DC    CL10' '              SPACER                          00198001
000209 4040404040404040                 963=PAGEHD3D DC    CL100' '             PAGE TEXT HEADING               00199001
00026D                   0026D 00277    964=         ORG                                                        00200001
                                        965=*                                                                   00201001
                                        966=*                                                                   00202001
                                        967=*        END OF STANDARD COMMON AREA                                00203001
                                        968=*                                                                   00204001
                         00277          969=STANDX   EQU   *                                                    00205001
                                        970=*                                                                   00206001
                                        971=*        THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL         00207001
                                        972=*        PHASES AND PARTLY OVERLAY EACH OTHER                       00208001
                                        973=*                                                                   00209001
                                        974=*                     NAME OR PURPOSE          NEEDED BY PHASES 00210001
                                        975=*                                                                   00211001
000277 00
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

000278                                976=          DC    0F'0'                                                    00212001
000278 4040404040404040               977=PRELPOOL  DC    236C' ',20C'X' PRELIMINARY ERROR POOL     IEX10          00213001
000378                  00378 00416   978=          ORG   PRELPOOL+414                                             00214001
                                      979=*                          DCB FOR SYSIN                   11            00215001
                                      980=SYSIN     DCB   DDNAME=SYSIN,                                           X00216001
                                         =                DSORG=PS,                                               X00217001
                                         =                MACRF=(GM),                                             X00218001
                                         =                RECFM=FB,                                               X00219001
                                         =                LRECL=80,                                               X00220001
                                         =                BFTEK=S                                                  00221001


                                      982+*                      DATA CONTROL BLOCK                                01-DCB
                                      983+*                                                                        01-DCB
000416 0000
000418                                984+SYSIN     DC    0F'0'                 ORIGIN ON WORD BOUNDARY            01-DCB

                                      986+*                      DIRECT ACCESS DEVICE INTERFACE                    01-DCB

000418 0000000000000000               988+          DC    BL16'0'                FDAD,DVTBL                        01-DCB
000428 00000000                       989+          DC    A(0)                   KEYLE,DEVT,TRBAL                  01-DCB

                                      991+*                      COMMON ACCESS METHOD INTERFACE                    01-DCB

00042C 00                             993+          DC    AL1(0)                BUFNO                              01-DCB
00042D 000001                         994+          DC    AL3(1)                BUFCB                              01-DCB
000430 0000                           995+          DC    AL2(0)           BUFL                                    01-DCB
000432 4000                           996+          DC    BL2'0100000000000000'           DSORG                    01-DCB
000434 00000001                       997+          DC    A(1)                   IOBAD                             01-DCB

                                      999+*                      FOUNDATION EXTENSION                              01-DCB

000438 40                            1001+          DC    BL1'01000000'                BFTEK,BFLN,HIARCHY          01-DCB
000439 000001                        1002+          DC    AL3(1)                EODAD                              01-DCB
00043C 90                            1003+          DC    BL1'10010000'         RECFM                              01-DCB
00043D 000000                        1004+          DC    AL3(0)                EXLST                              01-DCB

                                     1006+*                      FOUNDATION BLOCK                                  01-DCB

000440 E2E8E2C9D5404040              1008+          DC    CL8'SYSIN'            DDNAME                             01-DCB
000448 02                            1009+          DC    BL1'00000010'         OFLGS                              01-DCB
000449 00                            1010+          DC    BL1'00000000'                        IFLG                01-DCB
00044A 5000                          1011+          DC    BL2'0101000000000000'   MACR                             01-DCB

                                     1013+*                      BSAM-BPAM-QSAM INTERFACE                          01-DCB

00044C 00                            1015+          DC    BL1'00000000'                                       RER1 01-DCB
00044D 000001                        1016+          DC    AL3(1)                CHECK, GERR, PERR                  01-DCB
000450 00000001                      1017+          DC    A(1)                  SYNAD                              01-DCB
000454 0000                          1018+          DC    H'0'                  CIND1, CIND2                       01-DCB
000456 0000                          1019+          DC    AL2(0)                BLKSIZE                            01-DCB
000458 00000000                      1020+          DC    F'0'                  WCPO, WCPL, OFFSR, OFFSW           01-DCB
00045C 00000001                      1021+          DC    A(1)                  IOBA                               01-DCB
000460 00                            1022+          DC    AL1(0)                NCP                                01-DCB
000461 000001                        1023+          DC    AL3(1)                EOBR, EOBAD                        01-DCB

                                     1025+*                           QSAM INTERFACE                               01-DCB

000464 00000001                      1027+          DC    A(1)                   RECAD                             01-DCB
000468 0000                          1028+          DC    H'0'                  QSWS                               01-DCB
00046A 0050                          1029+          DC    AL2(80)        LRECL                                     01-DCB
00046C 00                            1030+          DC    BL1'00000000'         EROPT                              01-DCB
00046D 000001                        1031+          DC    AL3(1)                CNTRL                              01-DCB
000470 00000000                      1032+          DC    F'0'                  PRECL                              01-DCB
000474 00000001                      1033+          DC    A(1)                  EOB                                01-DCB
                                     1034=*               SYNAD=SYNAD    (ASSEMBLED IN IEX00001)                   00222001
                                     1035=*               EODAD=EODADIN  (INSERTED BY IEX11)                       00223001
000478                  00478 00278  1036=          ORG   PRELPOOL                                                 00224001
000278                               1037=PBTAB2    DS    CL510          PROGR. BLOCK TABLE 2          20-50       00225001
000478                               1038=          DS    0F                                                       00226001
000478                               1039=PBTAB1    DS    CL255          PROGR. BLOCK TABLE 1          11-20       00227001
000577                  00577 00478  1040=          ORG   PBTAB1                                                   00228001
000478                               1041=FSTAB     DS    CL255          FOR STATEMENT TABLE           30-40       00229001
                                     1042=*                              DCB FOR SYSUT1                11-30       00230001
                                     1043=SYSUT1    DCB   DDNAME=SYSUT1,                                          X00231001
                                         =                DSORG=PS,                                               X00232001
                                         =                MACRF=(R,W),                                            X00233001
                                         =                RECFM=F                                                  00234001


                                     1045+*                      DATA CONTROL BLOCK                                01-DCB
                                     1046+*                                                                        01-DCB
000577 00
000578                               1047+SYSUT1    DC    0F'0'                 ORIGIN ON WORD BOUNDARY            01-DCB

                                     1049+*                      DIRECT ACCESS DEVICE INTERFACE                    01-DCB

000578 0000000000000000              1051+          DC    BL16'0'                FDAD,DVTBL                        01-DCB
000588 00000000                      1052+          DC    A(0)                   KEYLE,DEVT,TRBAL                  01-DCB

                                     1054+*                      COMMON ACCESS METHOD INTERFACE                    01-DCB

00058C 00                            1056+          DC    AL1(0)                BUFNO                              01-DCB
00058D 000001                        1057+          DC    AL3(1)                BUFCB                              01-DCB
000590 0000                          1058+          DC    AL2(0)           BUFL                                    01-DCB
000592 4000                          1059+          DC    BL2'0100000000000000'           DSORG                    01-DCB
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000594 00000001                     1060+         DC     A(1)                    IOBAD                           01-DCB

                                    1062+*                      FOUNDATION EXTENSION                             01-DCB

000598 00                           1064+         DC     BL1'00000000'                 BFTEK,BFLN,HIARCHY        01-DCB
000599 000001                       1065+         DC     AL3(1)                 EODAD                            01-DCB
00059C 80                           1066+         DC     BL1'10000000'          RECFM                            01-DCB
00059D 000000                       1067+         DC     AL3(0)                 EXLST                            01-DCB

                                    1069+*                      FOUNDATION BLOCK                                 01-DCB

0005A0 E2E8E2E4E3F14040             1071+         DC     CL8'SYSUT1'            DDNAME                           01-DCB
0005A8 02                           1072+         DC     BL1'00000010'          OFLGS                            01-DCB
0005A9 00                           1073+         DC     BL1'00000000'                         IFLG              01-DCB
0005AA 2020                         1074+         DC     BL2'0010000000100000'  MACR                             01-DCB

                                    1076+*                      BSAM-BPAM-QSAM INTERFACE                         01-DCB

0005AC 00                           1078+         DC     BL1'00000000'                                      RER1 01-DCB
0005AD 000001                       1079+         DC     AL3(1)                 CHECK, GERR, PERR                01-DCB
0005B0 00000001                     1080+         DC     A(1)                   SYNAD                            01-DCB
0005B4 0000                         1081+         DC     H'0'                   CIND1, CIND2                     01-DCB
0005B6 0000                         1082+         DC     AL2(0)                 BLKSIZE                          01-DCB
0005B8 00000000                     1083+         DC     F'0'                   WCPO, WCPL, OFFSR, OFFSW         01-DCB
0005BC 00000001                     1084+         DC     A(1)                   IOBA                             01-DCB
0005C0 00                           1085+         DC     AL1(0)                 NCP                              01-DCB
0005C1 000001                       1086+         DC     AL3(1)                 EOBR, EOBAD                      01-DCB

                                    1088+*                        BSAM-BPAM INTERFACE                            01-DCB

0005C4 00000001                     1090+         DC     A(1)                   EOBW                             01-DCB
0005C8 0000                         1091+         DC     H'0'                   DIRCT                            01-DCB
0005CA 0000                         1092+         DC     AL2(0)        LRECL                                     01-DCB
0005CC 00000001                     1093+         DC     A(1)                   CNTRL, NOTE, POINT               01-DCB
                                    1094=*               SYNAD=SYNAD,  (ASSEMBLED IN IEX00001)                   00235001
                                    1095=*               EODAD=EODAD1                                            00236001
                                    1096=*                                                                       00237001
0005D0                              1097=         DS     0F                                                      00238001
0005D0                              1098=SPTAB    DS     CL255         SCOPE TABLE                  11-30        00239001
0006D0                              1099=         DS     0F                                                      00240001
                      006CD         1100=GPTAB    EQU    *-3           GROUP TABLE                  11-30        00241001
0006D0                              1101=         DS     CL1510                                                  00242001
                                    1102=*                                                                       00243001
                                    1103=*        END OF SYMLIB PART OF COMMON WORK AREA                         00244001
                                    1104=*                                                                       00245001
                                    1105 *                                                                       00109001
                                    1106 *        REGISTER EQUATES                                               00110001
                                    1107 *                                                                       00111001
                                    1108          IEZREGS                                                        00112001
                      00000         1109+R0       EQU    0                                                       01-IEZRE
                      00001         1110+R1       EQU    1                                                       01-IEZRE
                      00002         1111+R2       EQU    2                                                       01-IEZRE
                      00003         1112+R3       EQU    3                                                       01-IEZRE
                      00004         1113+R4       EQU    4                                                       01-IEZRE
                      00005         1114+R5       EQU    5                                                       01-IEZRE
                      00006         1115+R6       EQU    6                                                       01-IEZRE
                      00007         1116+R7       EQU    7                                                       01-IEZRE
                      00008         1117+R8       EQU    8                                                       01-IEZRE
                      00009         1118+R9       EQU    9                                                       01-IEZRE
                      0000A         1119+R10      EQU    10                                                      01-IEZRE
                      0000B         1120+R11      EQU    11                                                      01-IEZRE
                      0000C         1121+R12      EQU    12                                                      01-IEZRE
                      0000D         1122+R13      EQU    13                                                      01-IEZRE
                      0000E         1123+R14      EQU    14                                                      01-IEZRE
                      0000F         1124+R15      EQU    15                                                      01-IEZRE
                                    1125 *                                                                       00113001
                                    1126          END                                                            00114001
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Symbol    Length    Value     Id    Type Asm  Program   Defn  References                        X390 3.1.04  2012/08/17 13.13

=A(IEX60000)
               4 00000058 00000001  A A             114    95
AWADDTAB       4 0000057C 00000004  F F             469   169   425
AWEMPOOL       4 00000578 00000004  F F             468   139M  160
BLANKS         5 00000594 00000004  C C             477   210
COMPFLGS       4 00000080 FFFFFFFF  X X             828   143   190M  195M  196M  199M  282   397   414   419   438M
COMPMODE       1 00000080           U               832   196
COT01          4 000000B6 00000004  I               160   149B  392B  446B
COT03A         4 00000110 00000004  I               193   189B
COT03B         4 00000124 00000004  I               199   194B
COT04          2 00000128 00000004  I               203   191B  197B
COT05          4 00000186 00000004  I               231   223B  269B
COT06          4 0000018E 00000004  I               238   231B
COT07          4 000001F0 00000004  I               273   245B
COT08          4 000001E0 00000004  I               266   278B  307B
COT09          4 000001E8 00000004  I               268   255B  259B  276B
COT10          4 00000206 00000004  I               282   247B
COT11          2 00000264 00000004  I               309   302B
COT12          4 0000028E 00000004  I               326   232B
COT17          4 000002B8 00000004  I               342   340B
COT18          4 000003A6 00000004  I               416   144B
COT18A         4 000003AE 00000004  I               419   415B
COT19          4 000002D8 00000004  I               352   350B
COT20          4 000002BC 00000004  I               343   355B
COT21          2 00000356 00000004  I               387   345B
COT24          4 000002F0 00000004  I               364   373M
COT25          4 000002E6 00000004  I               359   327B
COT26          4 00000152 00000004  I               214   209B
COT27          4 00000346 00000004  I               379   338B  348B  428B  431B
COT28          4 0000037C 00000004  I               398   147B
COT29          2 00000386 00000004  H H             403   399B  439B
COT30          4 000001D4 00000004  I               263   243B
COT31          4 00000164 00000004  I               221   212B
COT32          4 00000216 00000004  I               287   283B
COT32A         4 0000021A 00000004  I               288   285B
COT32B         4 00000240 00000004  I               298   294B
COT33          4 0000026E 00000004  I               315   249B
COT34          6 00000284 00000004  I               321   318M
COT35          4 000001E4 00000004  I               267   311B  322B
COT36          4 000000D0 00000004  I               168   165B
COT37          4 000001BA 00000004  I               253   242B
COT38          4 000001C4 00000004  I               256   258B
CPI           20 00000564 00000004  C C             464   429
ERET           4 00000090 FFFFFFFF  F F             890   141M  394M
ERR            1 00000008           U               863   419
ERRINFO        4 0000004C 00000001  V V             109    97
ERRPOOL        4 000000BC FFFFFFFF  A A             910   145   395
EXMVC          6 0000033C 00000004  I               373   360X
HEADD1        11 0000053E 00000004  C C             461   148   155
HEADD2        27 00000549 00000004  C C             462   156
IEX21M00       1 00000000 00000002  T               109   109
IEX21M01       1 00000000 00000003  T               110   110
IEX21000       1 00000000 00000001  J                85    93U
IEX60000       1 00000060 00000004  J               121   114   123U
IHB0004A       2 0000033A 00000004  H H             370   364B
LAST           4 000003FE 00000004  I               443   417B  420B
LATBEG         1 0000006C           U               899   900
LATNR          1 0000001C           U               898   899
LINCNT         2 00000098 FFFFFFFF  H H             893   150M
MODNUMB        2 00000580 00000004  H H             470   166   422
NEXTERR        4 000000C0 FFFFFFFF  A A             911   146   390   396M  432   443
NSRCE          1 00000080           U               850   438
PAGEHD1      121 0000010C FFFFFFFF  C C             942   943   947
PAGEHD1C       1 0000010C FFFFFFFF  C C             944   151M  152M
PAGEHD1D     100 00000117 FFFFFFFF  C C             946   153   154   155M
PAGEHD2      121 00000185 FFFFFFFF  C C             952   953
PAGEHD2D     100 00000190 FFFFFFFF  C C             956   153M  156M
PAGEHD3      121 000001FE FFFFFFFF  C C             959   960
PAGEHD3D     100 00000209 FFFFFFFF  C C             963   154M
PAGEHEAD       1 0000010C FFFFFFFF  U               941   148
PBTAB1       255 00000478 FFFFFFFF  C C            1039  1040
PRELPOOL       1 00000278 FFFFFFFF  C C             977   910   911   978  1036
PRT            1 00000080           U               874   143   414
PRTNO          1 00000010           U               877   143
PRTRTADD       4 000000B8 FFFFFFFF  A A             906   380
R1             1 00000001           U              1110    97M  139   429   430   435   436   452   453
R10            1 0000000A           U              1119   163M  164   166M  167   178M  182   186M  187   188   193
                                                         203M  204M  205   214M  215   224M  228   239M  263M  264M
                                                         274M  275   277M  289M  290M  291M  292   297M  298M  299M
                                                         301   303M  305   306M  310   319M  337M  343M  393M  394
                                                         395M  396   422M  423   433M  434   444M  445   451   452
                                                         453
R11            1 0000000B           U              1120   225M  226M  227M  228M  229   230   240M  265M  266   267
                                                         273M  275M  284M  287M  303   304M  305M  309M  316M  317M
                                                         318   320   331M  333M  335M  339M  341   344M  347M  349M
                                                         351   359M  360
R12            1 0000000C           U              1121   179M  180M  231M
R13            1 0000000D           U              1122   138U
R14            1 0000000E           U              1123    96M  142   221M  230M  254   256   257M  267M  310   321
                                                         331   379   381M  382M  398M  400B  451
R15            1 0000000F           U              1124    89    93U  142   338M  348M  352M  353   379   380M  381B
                                                         382M  383B  398M  428M  431M
R2             1 00000002           U              1111    95M   98B  123U
R3             1 00000003           U              1112   253M  254M  258M  288M  295M  299
R4             1 00000004           U              1113   160M
R5             1 00000005           U              1114   145M  146   162   204   208   211   214   273   277   291
                                                         316   319   388   389M  391   443M  445M
```

```
Symbol     Length    Value     Id     Type Asm  Program    Defn  References                X390 3.1.04  2012/08/17 13.13

R6              1 00000006           U                     1115   175M  241   244   246   248   263   265   268M  289
R7              1 00000007           U                     1116   161M  162M  164   167M  168M  170M  171M  175   177   186
                                                                  222   224   226   227   264   421M  423M  424M  426M  427M
                                                                  430
R9              1 00000009           U                     1118   140M  141   169M  170   176M  177M  178   179   181M  182M
                                                                  186   238M  290   300M  301   315M  317   332M  333   334M
                                                                  335   336M  341M  342   343   346M  347   351M  353M  354
                                                                  387M  388M  389   390M  391   425M  426   432M  434M  435
SCAN3           2 00000034 00000001  H H                    101    96
SERR            1 00000010           U                      844   195
SET60           1 00000002           U                      883   282
SRCE1S          4 000000E0 FFFFFFFF  F F                    925   926
SVAR1           4 0000058C 00000004  F F                    476   142M  398
SVAR2           4 00000584 00000004  F F                    475   379M  382
SWTO            1 00000582 00000004  X X                    474   326   416M
TERR            1 00000008           U                      845   199   397
TRINTEXT        8 00000599 00000004  C C                    483   321
WAREA          20 00000430 00000004  C C                    456   187M  206M  207M  210M  216M  217M  221   253   332   337
                                                                  373
WDEC            8 00000420 00000004  D D                    455   205M  206   215M  216   292M  293   296M  297
WDIRET1         4 0000039E 00000004  I                      414   140
WDIRET2         4 000003F6 00000004  I                      438   375B  393
WERR            1 00000020           U                      843   190
WMOVE1          6 0000040C 00000004  I                      451   229X  266X  320X
WMOVE3          6 00000412 00000004  I                      452   342X
WMOVE4          6 00000418 00000004  I                      453   354X
WORDSEBC        1 000005B4 00000004  U                      618   287
WORDSISO        1 0000069C 00000004  U                      689   284
WORKAREA        1 00000000 FFFFFFFF  J                      762   138U
WSYMBSRC        1 000005F8 00000004  X X                    500   295
WSYMBSTK        1 00000656 00000004  X X                    558   288
```

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)                 X390 3.1.04  2012/08/17 13.13

    0(0)  (no references identified)
    1(1)    97M  139   364M  429   430   435   436   452   453
    2(2)    95M   98B  123U
    3(3)   253M  254M  258M  288M  295M  299
    4(4)   160M
    5(5)   145M  146   162   204N  208   211   214   273   277   291   316   319   388   389M  391   443M  445M
    6(6)   175M  241   244   246   248   263   265   268M  289
    7(7)   161M  162M  164   167M  168M  170M  171M  175   177   186   222   224   226   227   264   421M  423M  424M
           426M  427M  430
    8(8)  (no references identified)
    9(9)   140M  141   169M  170   176M  177M  178   179   181M  182M  186N  238M  290   300M  301   315M  317   332M
           333   334M  335   336M  341M  342   343N  346M  347   351M  353M  354   387M  388M  389   390M  391   425M
           426   432M  434M  435
   10(A)   163M  164   166M  167   178M  182   186M  187   188   193   203M  204M  205   214M  215   224M  228   239M
           263M  264M  264N  274M  275   277M  289M  290M  291M  291N  292   297M  298M  299M  299N  301   303M  303N
           305   306M  310   319M  337M  343M  393M  394   395M  396   422M  423   433M  434   444M  445   451   452
           453
   11(B)   225M  226M  227M  228M  229   230N  240M  265M  266   267N  273M  275M  284M  287M  303   304M  305M  309M
           316M  317M  318   320   331M  333M  335M  339M  341   344M  347M  349M  351   359M  360
   12(C)   179M  180M  231M
   13(D)   138U
   14(E)    96M  142   221M  230M  254   256   257M  267M  310   321   331   379   381M  382M  398M  400B  451
   15(F)    89B   93U  103M  142   338M  348M  352M  353   379   380M  381B  382M  383B  398M  405M  428M  431M
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| WORKAREA | 00000CB6 | FFFFFFFF | 762 | | PRIMARY INPUT |

```
Con Source      Members                                                          X390 3.1.04  2012/08/17 13.13

  1 SYS1.MACLIB
                DCB      IEZREGS  IHBINNRB IHB01    WTO      XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
                IEX60000
  4 SYSD.ALGOLF.MACLIB
                IEXENTRY WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text |
|---|---|---|---|---|---|---|---|---|---|---|
| 93 | | USING | Ordinary | 00000001 | 00000000 | 00001000 | 15 | 00058 | 103 | IEX21000,R15 |
| 123 | | USING | Ordinary | 00000004 | 00000060 | 00001000 | 2 | 0063C | 446 | IEX60000,R2 |
| 138 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 13 | 00209 | 443 | WORKAREA,R13 |

X390 3.1.04 2012/08/17 13.13

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X21    STEPNAME: IEX21    PROCSTEP: X390

Primary input:  lines      1 to     114 of SYSD.ALGOLF.ASM(IEX21)

SYSLIB library records read: 3416

SYSUT1 work file size: 110990 bytes

SYSUT2 work file size: 216680 bytes

SYSUT3 work file size: 9120 bytes

SYSLIN file records written: 44

TXA000I Return code 0, elapsed time 1.22 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX21000 | 00005C | 4 |
| IEX60000 | 000884 | 4 |

# IEX21M

LEVEL

V2.M01

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       --------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX21M)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131305.RA000.T121M.OBJECT
SYSPRINT    JES2.JOB09273.SO0102
SYSUT1      SYS12230.T131305.RA000.T121M.SYSUT1
SYSUT2      SYS12230.T131305.RA000.T121M.SYSUT2
SYSUT3      SYS12230.T131305.RA000.T121M.SYSUT3
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     2 *                                                                       00002001
                                     3 *        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                    00003001
                                     4 *                                                                       00004001
                                     5 *        FUNCTION/OPERATION -                                           00005001
                                     6 *        THIS MODULE CONTAINS MESSAGE TEXTS FOR ALL ERRORS THAT         00006001
                                     7 *        MAY BE DETECTED BY IEX00, IEX10, IEX11, AND IEX20, AND         00007001
                                     8 *        THE CORRESPONDING ADDRESS TABLE                                00008001
                                     9 *                                                                       00009001
                                    10 *        ENTRY POINT - N/A                                              00010001
                                    11 *                                                                       00011001
                                    12 *        INPUT -  N/A                                                   00012001
                                    13 *                                                                       00013001
                                    14 *        OUTPUT - N/A                                                   00014001
                                    15 *                                                                       00015001
                                    16 *        EXTERNAL ROUTINES -  N/A                                       00016001
                                    17 *                                                                       00017001
                                    18 *        EXITS - NORMAL -  N/A                                          00018001
                                    19 *                                                                       00019001
                                    20 *        EXITS - ERROR -  N/A                                           00020001
                                    21 *                                                                       00021001
                                    22 *        TABLES/WORKAREAS -  N/A                                        00022001
                                    23 *                                                                       00023001
                                    24 *        NOTES -                                                        00024001
                                    25 *        THIS MODULE IS LINKED WITH THE MODULE IEX21 TO FORM THE        00025001
                                    26 *        MODULE IEX21                                                   00026001
                                    27 *                                                                       00027001
000000              00000 00EBC     28 IEX21M00 CSECT                                                          00028001
                                    29 *                                                                       00029001
                                    30          ENTRY IEX21M01                                                 00030001
                                    31 *                                                                       00031001
                                    32 *        ERROR MESSAGE POOL 1                                           00032001
                                    33 *                                                                       00033001
                    00000           34 WEMPOOL1 EQU   *                                                        00034001
                                    35 *                                                                       00035001
000000 1C00                         36 W001     DC    X'1C00'                                                  00036001
000002 E6C9D5E5C1D3C9C4             37          DC    CL27'WINVALID CHARACTER DELETED.'                        00037001
                                    38 *                                                                       00038001
00001D 2100                         39 W002     DC    X'2100'                                                  00039001
00001F E6C9D3D3C5C7C1D3             40          DC    CL32'WILLEGAL PERIOD. PERIOD DELETED.'                   00040001
                                    41 *                                                                       00041001
00003F 2F0300130C240020             42 W003     DC    X'2F0300130C240020000F20'                                00042001
00004A E6C9D5E5C1D3C9C4             43          DC    CL37'WINVALID COLON AFTER . COLON DELETED.'              00043001
                                    44 *                                                                       00044001
00006F 1900                         45 W004     DC    X'1900'                                                  00045001
000071 E3D3C5E3E3C5D940             46          DC    CL24'TLETTER STRING TOO LONG.'                           00046001
                                    47 *                                                                       00047001
000089 3F00                         48 W005     DC    X'3F00'                                                  00048001
00008B E2C9C4C5D5E3C9C6             49          DC    CL62'SIDENTIFIER BEGINS WITH INVALID CHARACTER. IDENTIFIX00049001
                                                      ER DELETED.'                                             00050001
                                    50 *                                                                       00051001
0000C9 2500                         51 W006     DC    X'2500'                                                  00052001
0000CB E3D3C1C2C5D340C3             52          DC    CL36'TLABEL CONTAINS TOO MANY CHARACTERS.'               00053001
                                    53 *                                                                       00054001
0000EF 5005001412240027             54 W007     DC    X'5005001412240027001B27F00000000D43'                    00055001
000100 E6D3C1C2C5D340C2             55          DC    CL64'WLABEL BEGINNING WITH  CONTAINS INVALID CHARACTER.CX00056001
                                                      OLON DELETED.'                                           00057001
                                    56 *                                                                       00058001
000140 3500                         57 W008     DC    X'3500'                                                  00059001
000142 E6D3C1C2C5D340C2             58          DC    CL52'WLABEL BEGINS WITH INVALID CHARACTER. COLON DELETEDX00060001
                                                      .'                                                       00061001
                                    59 *                                                                       00062001
000176 3703001F0C24002C             60 W010     DC    X'3703001F0C24002C000B2C'                                00063001
000181 E2E2D7C5C3C9C6C9             61          DC    CL45'SSPECIFICATION PART OF PROCEDURE  INCOMPLETE.'      00064001
                                    62 *                                                                       00065001
0001AE 2800                         63 W011     DC    X'2800'                                                  00066001
0001B0 E2D7D9D6C7D9C1D4             64          DC    CL39'SPROGRAM STARTS WITH ILLEGAL DELIMITER.'            00067001
                                    65 *                                                                       00068001
0001D7 3C0300150C240022             66 W012     DC    X'3C0300150C240022001A22'                                00069001
0001E2 E6E3E6D640C1D7D6             67          DC    CL50'WTWO APOSTROPHES AFTER . FIRST APOSTROPHE DELETED.' 00070001
                                    68 *                                                                       00071001
000214 3E0300310C24003E             69 W013     DC    X'3E0300310C24003E00003E'                                00072001
00021F E6C1D7D6E2E3D9D6             70          DC    CL52'WAPOSTROPHE ASSUMED AFTER DELIMITER BEGINNING WITH X00073001
                                                      .'                                                       00074001
                                    71 *                                                                       00075001
000253 470300180C240025             72 W014     DC    X'470300180C240025002225'                                00076001
00025E E2C4C5D3C9D4C9E3             73          DC    CL61'SDELIMITER BEGINNING WITH  INVALID. FIRST APOSTROPHX00077001
                                                      E DELETED.'                                              00078001
                                    74 *                                                                       00079001
00029B 3400                         75 W015     DC    X'3400'                                                  00080001
00029D E6D4C9E2E2C9D5C7             76          DC    CL51'WMISSING SEMICOLON AFTER ''CODE''. SEMICOLON ASSUMEX00081001
                                                      D.'                                                      00082001
                                    77 *                                                                       00083001
0002D0 5A0500191224002C             78 W016     DC    X'5A0500191224002C001B2CF00000001248'                    00084001
0002E1 E2C9C4C5D5E3C9C6             79          DC    CL74'SIDENTIFIER BEGINNING WITH  CONTAINS INVALID CHARACX00085001
                                                      TER.IDENTIFIER DELETED.'                                 00086001
                                    80 *                                                                       00087001
00032B 3E00                         81 W017     DC    X'3E00'                                                  00088001
00032D E2D4D6D9C540E3C8             82          DC    CL61'SMORE THAN 65535 SEMICOLONS. SEMICOLON COUNTER RESEX00089001
                                                      T TO ZERO.'                                              00090001
                                    83 *                                                                       00091001
00036A 2A00                         84 W018     DC    X'2A00'                                                  00092001
00036C E6C4C5D3C9D4C9E3             85          DC    CL41'WDELIMITER ''COMMENT'' IN ILLEGAL POSITION.'        00093001
                                    86 *                                                                       00094001
000395 6200                         87 W020     DC    X'6200'                                                  00095001
000397 E3C2D3D6C3D2E26B             88 C        DC    CL97'TBLOCKS, COMPOUND STATEMENTS, FOR STATEMENTS AND PRX00096001
                                                      OCEDURE DECLARATIONSNESTED TO TOO MANY LEVELS.'          00097001
```

```
  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                               X390 3.1.04  2012/08/17 13.13

                                       89 *                                                                    00098001
0003F8 2B03000A0C240017                90 W021     DC    X'2B03000A0C240017001417'                             00099001
000403 E2C4C5C3D3C1D9C1                91          DC    CL33'SDECLARATOR  IN ILLEGAL POSITION.'               00100001
                                       92 *                                                                    00101001
000424 1F00                            93 W022     DC    X'1F00'                                               00102001
000426 E3D4D6D9C540E3C8                94          DC    CL30'TMORE THAN 255 PROGRAM BLOCKS.'                  00103001
                                       95 *                                                                    00104001
000444 1700                            96 W023     DC    X'1700'                                               00105001
000446 E2E2E3D9C9D5C740                97          DC    CL22'SSTRING POOL OVERFLOW.'                          00106001
                                       98 *                                                                    00107001
00045C 3700                            99 W024     DC    X'3700'                                               00108001
00045E E2C4C5D3C9D4C9E3               100          DC    CL54'SDELIMITER ''CODE'' IN ILLEGAL POSITION. ''CODE'' DX00109001
                                                         ELETED.'                                              00110001
                                      101 *                                                                    00111001
000494 530300310CF00000               102 W025     DC    X'530300310CF0000000153E'                             00112001
00049F E2E2D7C5C3C9C6C9               103          DC    CL73'SSPECIFIER ''STRING'' OR ''LABEL'' IN ILLEGAL POSITX00113001
                                                         ION.SPECIFICATION DELETED.'                           00114001
                                      104 *                                                                    00115001
0004E8 430300090C240016               105 W026     DC    X'430300090C240016002D16'                             00116001
0004F3 E6D7C1D9C1D4C5E3               106          DC    CL57'WPARAMETER  MULTIPLY SPECIFIED. FIRST SPECIFICATIONX00117001
                                                          USED.'                                               00118001
                                      107 *                                                                    00119001
00052C 550500091224001C               108 W027     DC    X'550500091224001C00231CF00000001540'                 00120001
00053D E2D7C1D9C1D4C5E3               109          DC    CL69'SPARAMETER  MISSING FROM FORMAL PARAMETER LIST.SPECX00121001
                                                         IFICATION IGNORED.'                                   00122001
                                      110 *                                                                    00123001
000582 3E00                           111 W028     DC    X'3E00'                                               00124001
000584 E2C4C5D3C9D4C9E3               112          DC    CL61'SDELIMITER ''VALUE'' IN ILLEGAL POSITION. ''VALUE''X00125001
                                                          PART DELETED.'                                       00126001
                                      113 *                                                                    00127001
0005C1 2900                           114 W029     DC    X'2900'                                               00128001
0005C3 E6E2D7C5C3C9C6C9               115          DC    CL40'WSPECIFICATION PART PRECEDES VALUE PART.'        00129001
                                      116 *                                                                    00130001
0005EB 2D0300090C240016               117 W030     DC    X'2D0300090C240016001716'                             00131001
0005F6 E6D7C1D9C1D4C5E3               118          DC    CL35'WPARAMETER  REPEATED IN VALUE PART.'             00132001
                                      119 *                                                                    00133001
000619 660500391224004C               120 W031     DC    X'660500391224004C00004CF0000000194D'                 00134001
00062A E6D3C5C6E340D7C1               121          DC    CL86'WLEFT PARENTHESIS NOT FOLLOWED BY / AFTER ARRAY IDEX00135001
                                                         NTIFIER .SUBSCRIPT BRACKET ASSUMED.'                  00136001
                                      122 *                                                                    00137001
000680 5C05003512240048               123 W032     DC    X'5C05003512240048000048F00000001349'                 00138001
000691 E2D4C9E2E2C9D5C7               124          DC    CL76'SMISSING RIGHT PARENTHESIS IN BOUND PAIR LIST OF ARX00139001
                                                         RAY .DECLARATION DELETED.'                            00140001
                                      125 *                                                                    00141001
0006DD 440300370C240044               126 W033     DC    X'440300370C240044000044'                             00142001
0006E8 E3D4D6D9C540E3C8               127          DC    CL58'TMORE THAN 16 DIMENSIONS OR COMPONENTS IN DECLARATIX00143001
                                                         ON OF .'                                              00144001
                                      128 *                                                                    00145001
000722 6805000D12240020               129 W034     DC    X'6805000D12240020002320F00000002444'                 00146001
000733 E2C1D9D9C1E840E2               130          DC    CL88'SARRAY SEGMENT  NOT FOLLOWED BY SEMICOLON OR COMMA.X00147001
                                                         CHARACTERS TO NEXT SEMICOLON DELETED.'                00148001
                                      131 *                                                                    00149001
00078B 3900                           132 W035     DC    X'3900'                                               00150001
00078D E6C9D3D3C5C7C1D3               133          DC    CL56'WILLEGAL PERIOD IN ARRAY OR SWITCH LIST. PERIOD DELX00151001
                                                         ETED.'                                                00152001
                                      134 *                                                                    00153001
0007C5 360300290C240036               135 W036     DC    X'360300290C240036000036'                             00154001
0007D0 E3D4D6D9C540E3C8               136          DC    CL44'TMORE THAN 15 PARAMETERS IN DECLARATION OF .'    00155001
                                      137 *                                                                    00156001
0007FC 6805003012240043               138 W037     DC    X'6805003012240043000043F00000002444'                 00157001
00080D E2E2C5D4C9C3D6D3               139          DC    CL88'SSEMICOLON MISSING AFTER FORMAL PARAMETER LIST OF .X00158001
                                                         CHARACTERS TO NEXT SEMICOLON DELETED.'                00159001
                                      140 *                                                                    00160001
000865 2B00                           141 W038     DC    X'2B00'                                               00161001
000867 E3E3D6D640D4C1D5               142          DC    CL42'TTOO MANY IDENTIFIERS DECLARED IN A BLOCK.'      00162001
                                      143 *                                                                    00163001
000891 790484000F00390F               144 W039     DC    X'790484000F00390FF00000003049'                       00164001
00089F E240D4C9E2E2C9D5               145          DC    CL108'S MISSING ''END'' BRACKETS. OPEN BLOCKS, COMPOUND X00165001
                                                         STATEMENTS,FOR STATEMENTS AND PROCEDURE DECLARATIONS CLOX00166001
                                                         SED.'                                                 00167001
                                      146 *                                                                    00168001
00090B 1F00                           147 W041     DC    X'1F00'                                               00169001
00090D E3D4D6D9C540E3C8               148          DC    CL30'TMORE THAN 255 FOR STATEMENTS.'                  00170001
                                      149 *                                                                    00171001
00092B 3A00                           150 W042     DC    X'3A00'                                               00172001
00092D E67DC2C5C7C9D57D               151          DC    CL57'W''BEGIN'' PRECEDES PRECOMPILED PROCEDURE. ''BEGIN'X00173001
                                                         ' DELETED.'                                           00174001
                                      152 *                                                                    00175001
000966 5E0300300CF00000               153 W043     DC    X'5E0300300CF0000000213D'                             00176001
000971 E2C5D8E4C1D340D5               154          DC    CL84'SEQUAL NUMBER OF ''BEGIN'' AND ''END'' BRACKETS FOUX00177001
                                                         ND.REMAINING PART OF PROGRAM IGNORED.'                00178001
                                      155 *                                                                    00179001
0009C5 1A00                           156 W044     DC    X'1A00'                                               00180001
0009C7 E3D5D640E2D6E4D9               157          DC    CL25'TNO SOURCE PROGRAM FOUND.'                       00181001
                                      158 *                                                                    00182001
0009E0 4003000A0C240017               159 W045     DC    X'4003000A0C240017002917'                             00183001
0009EB E2C9C4C5D5E3C9C6               160          DC    CL54'SIDENTIFIER  MULTIPLY DECLARED. LAST DECLARATION USX00184001
                                                         ED.'                                                  00185001
                                      161 *                                                                    00186001
000A21 300300230C240030               162 W045B    DC    X'300300230C240030000030'                             00187001
000A2C E2C9D3D3C5C7C1D3               163          DC    CL38'SILLEGAL CALL BY VALUE OF IDENTIFIER .'          00188001
                                      164 *                                                                    00189001
                                      165 *        DIRECTORY MESSAGES, INITIATION PHASE                        00190001
                                      166 *                                                                    00191001
                        00A52         167 W200     EQU   *                                                     00192001
000A52 380300100C84001D               168 W046     DC    X'380300100C84001D001B1D'                             00193001
```

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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

000A5D E6D6D7E3C9D6D540              169         DC    CL46'WOPTION PARAMETER  INVALID. PARAMETER IGNORED.'      00194001
                                     170 *                                                                        00195001
                      00A8B          171 W201    EQU   *                                                          00196001
000A8B 2D03000B0C840018              172 W047    DC    X'2D03000B0C840018001518'                                  00197001
000A96 E3C4C440C3C1D9C4              173         DC    CL35'TDD CARD FOR  INCORRECT OR MISSING.'                  00198001
                                     174 *                                                                        00199001
                      00AB9          175 W202    EQU   *                                                          00200001
000AB9 4100                          176 W048    DC    X'4100'                                                    00201001
000ABB E6C4C440C3C1D9C4              177         DC    CL64'WDD CARD FOR SYSLIN INCORRECT OR MISSING. OPTION NOX00202001
                                                       LOAD ASSUMED.'                                             00203001
                                     178 *                                                                        00204001
                      00AFB          179 W203    EQU   *                                                          00205001
000AFB 4300                          180 W049    DC    X'4300'                                                    00206001
000AFD E6C4C440C3C1D9C4              181         DC    CL66'WDD CARD FOR SYSPUNCH INCORRECT OR MISSING. OPTION X00207001
                                                       NODECK ASSUMED.'                                           00208001
                                     182 *                                                                        00209001
                      00B3F          183 W204    EQU   *                                                          00210001
000B3F 2A00                          184 W050    DC    X'2A00'                                                    00211001
000B41 E3C2D3D6C3D2E2C9              185         DC    CL41'TBLOCKSIZE SPECIFIED FOR SYSIN INCORRECT.'            00212001
                                     186 *                                                                        00213001
                      00B6A          187 W205    EQU   *                                                          00214001
000B6A 480300170C840024              188 W051    DC    X'480300170C840024002424'                                  00215001
000B75 E6C2D3D6C3D2E2C9              189         DC    CL62'WBLOCKSIZE SPECIFIED FOR  INCORRECT. UNBLOCKED OUTPX00216001
                                                       UT ASSUMED.'                                               00217001
                                     190 *                                                                        00218001
                      00BB3          191 W206    EQU   *                                                          00219001
000BB3 4200                          192 W052    DC    X'4200'                                                    00220001
000BB5 E6E3D6D640D4C1D5              193         DC    CL65'WTOO MANY OPTION PARAMETER ERRORS. SUBSEQUENT PARAMX00221001
                                                       ETERS IGNORED.'                                            00222001
                                     194 *                                                                        00223001
                      00BF6          195 W207    EQU   *                                                          00224001
000BF6 2700                          196 W053    DC    X'2700'                                                    00225001
000BF8 E6D7D6E2E2C9C2D3              197         DC    CL38'WPOSSIBLE ERROR IN DD NAMES PARAMETER.'               00226001
                                     198 *                                                                        00227001
                      00C1E          199 W208    EQU   *                                                          00228001
000C1E 2D00                          200 W054    DC    X'2D00'                                                    00229001
000C20 E6E2C9E9C540D7C1              201         DC    CL44'WSIZE PARAMETER INVALID. SIZE 45056 ASSUMED.'         00230001
                                     202 *                                                                        00231001
                                     203 *       OTHER DIRECTORY MESSAGES                                         00232001
                                     204 *                                                                        00233001
                      00C4C          205 W209    EQU   *                                                          00234001
000C4C 460400360FF00000              206 W055    DC    X'460400360FF00000840046000046'                            00235001
000C5A E3C3D6D4D7C9D3C1              207         DC    CL57'TCOMPILATION UNSUCCESSFUL DUE TO PROGRAM INTERRUPT.X00236001
                                                        PSW .'                                                    00237001
                                     208 *                                                                        00238001
                      00C93          209 W056    EQU   *                                                          00239001
                      00C93          210 W210    EQU   *                                                          00240001
000C93 300300230C840030              211         DC    X'300300230C840030000030'                                  00241001
000C9E E3E4D5D9C5C3D6E5              212         DC    CL38'TUNRECOVERABLE I/O ERROR ON DATA SET .'               00242001
                                     213 *                                                                        00243001
                      00CC4          214 W057    EQU   *                                                          00244001
                      00CC4          215 W211    EQU   *                                                          00245001
000CC4 D7D9D6C7D9C1D440              216         DC    CL56'PROGRAM INTERRUPT IN ERROR MESSAGE EDITING ROUTINE.X00246001
                                                        PSW '                                                     00247001
                                     217 *                                                                        00248001
                      00CFC          218 W058    EQU   *                                                          00249001
000CFC 1200                          219 W212    DC    X'1200'                                                    00250001
000CFE E3E3D6D640D4C1D5              220         DC    CL17'TTOO MANY ERRORS.'                                    00251001
                                     221 *                                                                        00252001
                      00D0F          222 W059    EQU   *                                                          00253001
000D0F 2800                          223 W213    DC    X'2800'                                                    00254001
000D11 E3C9D5E3C5D9D5C1              224         DC    CL39'TINTERNAL OVERFLOW OF IDENTIFIER TABLE.'              00255001
                                     225 *                                                                        00256001
                      00D38          226 W060    EQU   *                                                          00257001
000D38 3903002D0C84003A              227 W214    DC    X'3903002D0C84003A00003A'                                  00258001
000D43 E2C4C1E3C140E2E3              228         DC    CL48'SDATA STORAGE AREA EXCEEDED, PROGRAM BLOCK NO. .'     00259001
                                     229 *                                                                        00260001
                      00D73          230 W215    EQU   *                                                          00261001
000D73 1A00                          231 W061    DC    X'1A00'                                                    00262001
000D75 E3E2D6E4D9C3C540              232         DC    CL25'TSOURCE PROGRAM TOO LONG.'                            00263001
                                     233 *                                                                        00264001
000D8E 2600                          234 W216    DC    X'2600'                                                    00265001
000D90 E2E3D6D640D4C1D5              235         DC    CL37'STOO MANY LABELS. LABEL NUMBER RESET.'                00266001
                                     236 *                                                                        00267001
000DB5 000000
000DB8                               237         DC    0F'0'                                                      00268001
                                     238 *                                                                        00269001
                                     239 *       ADDRESS TABLE FOR WEMPOOL1                                       00270001
                                     240 *                                                                        00271001
000DB8 00000000                      241 IEX21M01 DC   A(0)                                                       00272001
000DBC 00000000                      242         DC    A(W001)                                                    00273001
000DC0 0000001D                      243         DC    A(W002)                                                    00274001
000DC4 0000003F                      244         DC    A(W003)                                                    00275001
000DC8 0000006F                      245         DC    A(W004)                                                    00276001
000DCC 00000089                      246         DC    A(W005)                                                    00277001
000DD0 000000C9                      247         DC    A(W006)                                                    00278001
000DD4 000000EF                      248         DC    A(W007)                                                    00279001
000DD8 00000140                      249         DC    A(W008)                                                    00280001
000DDC 00000000                      250         DC    A(0)                                                       00281001
000DE0 00000176                      251         DC    A(W010)                                                    00282001
000DE4 000001AE                      252         DC    A(W011)                                                    00283001
000DE8 000001D7                      253         DC    A(W012)                                                    00284001
000DEC 00000214                      254         DC    A(W013)                                                    00285001
000DF0 00000253                      255         DC    A(W014)                                                    00286001
000DF4 0000029B                      256         DC    A(W015)                                                    00287001
000DF8 000002D0                      257         DC    A(W016)                                                    00288001
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000DFC 0000032B                     258          DC    A(W017)                                                   00289001
000E00 0000036A                     259          DC    A(W018)                                                   00290001
000E04 00000000                     260          DC    A(0)                                                      00291001
000E08 00000395                     261          DC    A(W020)                                                   00292001
000E0C 000003F8                     262          DC    A(W021)                                                   00293001
000E10 00000424                     263          DC    A(W022)                                                   00294001
000E14 00000444                     264          DC    A(W023)                                                   00295001
000E18 0000045C                     265          DC    A(W024)                                                   00296001
000E1C 00000494                     266          DC    A(W025)                                                   00297001
000E20 000004E8                     267          DC    A(W026)                                                   00298001
000E24 0000052C                     268          DC    A(W027)                                                   00299001
000E28 00000582                     269          DC    A(W028)                                                   00300001
000E2C 000005C1                     270          DC    A(W029)                                                   00301001
000E30 000005EB                     271          DC    A(W030)                                                   00302001
000E34 00000619                     272          DC    A(W031)                                                   00303001
000E38 00000680                     273          DC    A(W032)                                                   00304001
000E3C 000006DD                     274          DC    A(W033)                                                   00305001
000E40 00000722                     275          DC    A(W034)                                                   00306001
000E44 0000078B                     276          DC    A(W035)                                                   00307001
000E48 000007C5                     277          DC    A(W036)                                                   00308001
000E4C 000007FC                     278          DC    A(W037)                                                   00309001
000E50 00000865                     279          DC    A(W038)                                                   00310001
000E54 00000891                     280          DC    A(W039)                                                   00311001
000E58 00000000                     281          DC    A(0)                                                      00312001
000E5C 0000090B                     282          DC    A(W041)                                                   00313001
000E60 0000092B                     283          DC    A(W042)                                                   00314001
000E64 00000966                     284          DC    A(W043)                                                   00315001
000E68 000009C5                     285          DC    A(W044)                                                   00316001
000E6C 000009E0                     286          DC    A(W045)                                                   00317001
000E70 00000000                     287          DC    A(0)                                                      00318001
000E74 00000A21                     288          DC    A(W045B)                                                  00319001
000E78 00000A52                     289          DC    A(W046)                                                   00320001
000E7C 00000A8B                     290          DC    A(W047)                                                   00321001
000E80 00000AB9                     291          DC    A(W048)                                                   00322001
000E84 00000AFB                     292          DC    A(W049)                                                   00323001
000E88 00000B3F                     293          DC    A(W050)                                                   00324001
000E8C 00000B6A                     294          DC    A(W051)                                                   00325001
000E90 00000BB3                     295          DC    A(W052)                                                   00326001
000E94 00000BF6                     296          DC    A(W053)                                                   00327001
000E98 00000C1E                     297          DC    A(W054)                                                   00328001
000E9C 00000C4C                     298          DC    A(W055)                                                   00329001
000EA0 00000C93                     299          DC    A(W056)                                                   00330001
000EA4 00000CC4                     300          DC    A(W057)                                                   00331001
000EA8 00000CFC                     301          DC    A(W058)                                                   00332001
000EAC 00000D0F                     302          DC    A(W059)                                                   00333001
000EB0 00000D38                     303          DC    A(W060)                                                   00334001
000EB4 00000D73                     304          DC    A(W061)                                                   00335001
000EB8 00000D8E                     305          DC    A(W216)                                                   00336001
                                    306 *                                                                        00337001
                                    307          END                                                             00338001
```

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| IEX21M01 | 4 | 00000DB8 | 00000001 | A | A | | 241 | 30 |
| W001 | 2 | 00000000 | 00000001 | X | X | | 36 | 242 |
| W002 | 2 | 0000001D | 00000001 | X | X | | 39 | 243 |
| W003 | 11 | 0000003F | 00000001 | X | X | | 42 | 244 |
| W004 | 2 | 0000006F | 00000001 | X | X | | 45 | 245 |
| W005 | 2 | 00000089 | 00000001 | X | X | | 48 | 246 |
| W006 | 2 | 000000C9 | 00000001 | X | X | | 51 | 247 |
| W007 | 17 | 000000EF | 00000001 | X | X | | 54 | 248 |
| W008 | 2 | 00000140 | 00000001 | X | X | | 57 | 249 |
| W010 | 11 | 00000176 | 00000001 | X | X | | 60 | 251 |
| W011 | 2 | 000001AE | 00000001 | X | X | | 63 | 252 |
| W012 | 11 | 000001D7 | 00000001 | X | X | | 66 | 253 |
| W013 | 11 | 00000214 | 00000001 | X | X | | 69 | 254 |
| W014 | 11 | 00000253 | 00000001 | X | X | | 72 | 255 |
| W015 | 2 | 0000029B | 00000001 | X | X | | 75 | 256 |
| W016 | 17 | 000002D0 | 00000001 | X | X | | 78 | 257 |
| W017 | 2 | 0000032B | 00000001 | X | X | | 81 | 258 |
| W018 | 2 | 0000036A | 00000001 | X | X | | 84 | 259 |
| W020 | 2 | 00000395 | 00000001 | X | X | | 87 | 261 |
| W021 | 11 | 000003F8 | 00000001 | X | X | | 90 | 262 |
| W022 | 2 | 00000424 | 00000001 | X | X | | 93 | 263 |
| W023 | 2 | 00000444 | 00000001 | X | X | | 96 | 264 |
| W024 | 2 | 0000045C | 00000001 | X | X | | 99 | 265 |
| W025 | 11 | 00000494 | 00000001 | X | X | | 102 | 266 |
| W026 | 11 | 000004E8 | 00000001 | X | X | | 105 | 267 |
| W027 | 17 | 0000052C | 00000001 | X | X | | 108 | 268 |
| W028 | 2 | 00000582 | 00000001 | X | X | | 111 | 269 |
| W029 | 2 | 000005C1 | 00000001 | X | X | | 114 | 270 |
| W030 | 11 | 000005EB | 00000001 | X | X | | 117 | 271 |
| W031 | 17 | 00000619 | 00000001 | X | X | | 120 | 272 |
| W032 | 17 | 00000680 | 00000001 | X | X | | 123 | 273 |
| W033 | 11 | 000006DD | 00000001 | X | X | | 126 | 274 |
| W034 | 17 | 00000722 | 00000001 | X | X | | 129 | 275 |
| W035 | 2 | 0000078B | 00000001 | X | X | | 132 | 276 |
| W036 | 11 | 000007C5 | 00000001 | X | X | | 135 | 277 |
| W037 | 17 | 000007FC | 00000001 | X | X | | 138 | 278 |
| W038 | 2 | 00000865 | 00000001 | X | X | | 141 | 279 |
| W039 | 14 | 00000891 | 00000001 | X | X | | 144 | 280 |
| W041 | 2 | 0000090B | 00000001 | X | X | | 147 | 282 |
| W042 | 2 | 0000092B | 00000001 | X | X | | 150 | 283 |
| W043 | 11 | 00000966 | 00000001 | X | X | | 153 | 284 |
| W044 | 2 | 000009C5 | 00000001 | X | X | | 156 | 285 |
| W045 | 11 | 000009E0 | 00000001 | X | X | | 159 | 286 |
| W045B | 11 | 00000A21 | 00000001 | X | X | | 162 | 288 |
| W046 | 11 | 00000A52 | 00000001 | X | X | | 168 | 289 |
| W047 | 11 | 00000A8B | 00000001 | X | X | | 172 | 290 |
| W048 | 2 | 00000AB9 | 00000001 | X | X | | 176 | 291 |
| W049 | 2 | 00000AFB | 00000001 | X | X | | 180 | 292 |
| W050 | 2 | 00000B3F | 00000001 | X | X | | 184 | 293 |
| W051 | 11 | 00000B6A | 00000001 | X | X | | 188 | 294 |
| W052 | 2 | 00000BB3 | 00000001 | X | X | | 192 | 295 |
| W053 | 2 | 00000BF6 | 00000001 | X | X | | 196 | 296 |
| W054 | 2 | 00000C1E | 00000001 | X | X | | 200 | 297 |
| W055 | 14 | 00000C4C | 00000001 | X | X | | 206 | 298 |
| W056 | 1 | 00000C93 | 00000001 | U | | | 209 | 299 |
| W057 | 1 | 00000CC4 | 00000001 | U | | | 214 | 300 |
| W058 | 1 | 00000CFC | 00000001 | U | | | 218 | 301 |
| W059 | 1 | 00000D0F | 00000001 | U | | | 222 | 302 |
| W060 | 1 | 00000D38 | 00000001 | U | | | 226 | 303 |
| W061 | 2 | 00000D73 | 00000001 | X | X | | 231 | 304 |
| W216 | 2 | 00000D8E | 00000001 | X | X | | 234 | 305 |

X390 3.1.04 2012/08/17 13.13

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T121M    STEPNAME: IEX21M    PROCSTEP: X390

Primary input:  lines      1 to     338 of SYSD.ALGOLF.ASM(IEX21M)

SYSLIB library records read: 0

SYSUT1 work file size: 34408 bytes

SYSUT3 work file size: 27040 bytes

SYSLIN file records written: 75

TXA000I Return code 0, elapsed time 0.16 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX21M00 | 000EBC | 4 |

# IEX30

LEVEL

V2.M01

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       --------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
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SYSIN       SYSD.ALGOLF.ASM(IEX30)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131305.RA000.T1X30.OBJECT
SYSPRINT    JES2.JOB09274.SO0102
SYSUT1      SYS12230.T131305.RA000.T1X30.SYSUT1
SYSUT2      SYS12230.T131305.RA000.T1X30.SYSUT2
SYSUT3      SYS12230.T131305.RA000.T1X30.SYSUT3
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  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     2 *                                                                     00002001
                                     3 *        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                  00003001
                                     4 *                                                                     00004001
                                     5 *        FUNCTION/OPERATION -                                         00005001
                                     6 *        EXTERNAL NAMES OF IDENTIFIERS ARE REPLACED BY THE            00006001
                                     7 *        INTERNAL NAMES CONTAINED IN THE ITAB ENTRY OF THE            00007001
                                     8 *        IDENTIFIER, AND CONSTANTS ARE REPLACED BY INTERNAL NAMES     00008001
                                     9 *        CONSTRUCTED IN IEX30                                         00009001
                                    10 *        OBJECT CODE IS PRODUCED FROM THE CONSTANT POOL IF            00010001
                                    11 *        PARAMETERS DECK OR LOAD ARE SPECIFIED IN THE                 00011001
                                    12 *        EXEC STATEMENT                                               00012001
                                    13 *        FOR STATEMENTS ARE CLASSIFIED FOR FURTHER USE BY IEX50       00013001
                                    14 *        THE SUBSCRIPT TABLE (SUTAB) AND THE LEFT VARIABLE TABLE      00014001
                                    15 *        (LVTAB) ARE CONSTRUCTED FOR FURTHER USE BY IEX40             00015001
                                    16 *        SOURCE PROGRAM ERRORS CAUSES GENERATION OF ERROR             00016001
                                    17 *        PATTERNS FOR FUTHER USE BY 1EX31                             00017001
                                    18 *                                                                     00018001
                                    19 *        ENTRY POINT - IEX30000 FROM IEX21000 VIA XCTL                00019001
                                    20 *                                                                     00020001
                                    21 *        INPUT -                                                      00021001
                                    22 *        THE SOURCE PROGRAM MODIFICATION LEVEL 1 IS READ FROM         00022001
                                    23 *        SYSUT1                                                       00023001
                                    24 *        THE IDENTIFIER TABLE (ITAB) IS READ FROM SYSUT3              00024001
                                    25 *                                                                     00025001
                                    26 *        OUTPUT -                                                     00026001
                                    27 *        THE SOURCE PROGRAM MODIFICATION LEVEL 2 IS WRITTEN OUT       00027001
                                    28 *        ON SYSUT2                                                    00028001
                                    29 *        OBJECT TXT RECORDS IS WRITTEN ON SYSLIN OR/AND SYSPUNCH      00029001
                                    30 *        IF THE PARAMETERS LOAD OR/AND DECK ARE SPECIFIED IN THE      00030001
                                    31 *        EXEC CARD                                                    00031001
                                    32 *        THE SUBSCRIPT TABLE (SUTAB) IS WRITTEN OUT ON SYSUT3         00032001
                                    33 *        A LINEAR SUBSCRIPT EXPRESSION ENCOUNTED IN A FOR             00033001
                                    34 *        STATEMENT THAT IS OPTIMIZABLE IN REGARD TO SUBSCRIPTS        00034001
                                    35 *        WILL GENERATE AN ENTRY IN THIS TABLE                         00035001
                                    36 *        THE LEFT VARIABLE TABLE (LVTAB) IS WRITTEN OUT ON            00036001
                                    37 *        SYSUT3. INTEGER LEFT VARIABLES ENCOUNTED IN FOR              00037001
                                    38 *        STATEMENT THAT IS OPTIMIZABLE IN REGARD TO SUBSCRIPTS        00038001
                                    39 *        WILL GENERATE AN ENTRY IN THIS TABLE                         00039001
                                    40 *                                                                     00040001
                                    41 *        EXTERNAL ROUTINES -                                          00041001
                                    42 *        THE INTERRUPT ROUTINE OF IEX00 ARE USED FOR ALL              00042001
                                    43 *        INTERRUPTS EXCEPT FLOATING POINT OVERFLOW                    00043001
                                    44 *                                                                     00044001
                                    45 *        EXITS - NORMAL -                                             00045001
                                    46 *        CONTROL IS ALWAYS GIVEN TO IEX31 BY MEANS OF XCTL            00046001
                                    47 *        EP=IEX31                                                     00047001
                                    48 *                                                                     00048001
                                    49 *        TABLES/WORKAREAS -                                           00049001
                                    50 *        GROUP TABLE (GPTAB) CONSTRUCTED IN IEX11, USED TO            00050001
                                    51 *        DIAGNOSE BRANCHES INTO FOR STATEMENTS.                       00051001
                                    52 *        SCOPE TABLE (SPTAB) CONSTRUCTED IN IEX11, USED TO CHECK      00052001
                                    53 *        SUBSCRIPT EXPRESSIONS FOR POSSIBLE OPTIMIZATION              00053001
                                    54 *        FOR STATEMENT TABLE (FSTAB) CONSTRUCTED IN IEX30             00054001
                                    55 *        COMPLEATED IN IEX40 AND FINALLY USED IN IEX50, CONTAINS      00055001
                                    56 *        A CLASSIFICATION BYTE FOR EVERY FOR STATEMENT                00056001
                                    57 *        ERROR POOL CONSTRUCTED IN IEX30 AND USED IN IEX31,           00057001
                                    58 *        CONTAINS ERROR PATTERNS GENERATED FROM SOURCE PROGRAM        00058001
                                    59 *        ERRORS                                                       00059001
                                    60 *        CONSTANT POOL INTERNAL TABLE IN IEX30. THE FIRST             00060001
                                    61 *        APPEARANCE OF A CONSTANT IN THE SOURCE STREAM GENERATES      00061001
                                    62 *        AN ENTRY IN THE TABLE. THE RELATIVE ADDRESS OF THE           00062001
                                    63 *        CONSTANT POOL ENTRY IS USED IN CONSTRUCTING THE              00063001
                                    64 *        INTERNAL NAME OF A CONSTANT CRITICAL VARIABLE TABLE          00064001
                                    65 *        (CRIDTAB) INTERNAL TABLE IN IEX30                            00065001
                                    66 *        DURING THE TREATMENT OF A FOR STATEMENT THE TABLE            00066001
                                    67 *        CONTAINS ENTRIES CORRESPONDING TO THE IDENTIFIERS IN THE     00067001
                                    68 *        FOR LIST                                                     00068001
                                    69 *                                                                     00069001
                                    70 *        NOTES -                                                      00070001
                                    71 *        THE OPERATION OF THIS MODULE DOES NOT DEPEND ON ANY          00071001
                                    72 *        SPECIAL REPRESENTATION OF THE CHARACTER SET. THIS MODULE     00072001
                                    73 *        IS ONLY INTENDED TO BE EXECUTED IN CONNECTION WITH THE       00073001
                                    74 *        OTHER MODULES OF THE ALGOL COMPILER. IN PARTICULAR IT        00074001
                                    75 *        REQUIRES THE COMMON WORKAREA                                 00075001
                                    76 *                                                                     00076001
000000                00000 025F0   77 IEX30000 CSECT                                                        00077001
                                    78 *                                                                     00078001
                                    79 *        R3                            INPUT RECORD POINTER REGISTER  00079001
                                    80 *        R4                            OUTPUT RECORD POINTER REGISTER 00080001
                                    81 *                                                                     00081001
                                    82 *        BIT PATTERNS                                                 00082001
                                    83 *                                                                     00083001
                      00080         84 SARRAY   EQU   X'80'                 HANDLING ARRAY DECLARATION     00084001
                      00040         85 SSWITCH  EQU   X'40'                 HANDLING SWITCH DECLARATION    00085001
                      000FF         86 FF       EQU   X'FF'                                                00086001
                                    87 *                                    SCALE FACTOR MASKS             00087001
                      00080         88 SFSIGN   EQU   X'80'                 SIGNED SCALE FACTOR            00088001
                      00040         89 SFL0     EQU   X'40'                 LEADING ZERO IN SCALE FACTOR   00089001
                      00020         90 SF19     EQU   X'20'                 SIGNIFICANT DIGIT IN SCALE FAC 00090001
                      00010         91 SF       EQU   X'10'                 SCALE FACTOR PRESENT           00091001
                      00060         92 SFDIGIT  EQU   X'60'                                                00092001
                      000E0         93 SFLSIGN  EQU   X'E0'                                                00093001
                      00008         94 PRECERR  EQU   X'08'                 REAL CONSTANT EXCEEDS PRECISION 00094001
                                    95 *                                                                     00095001
                                    96 *        CLASSIFICATION MASKS OF I/O STATUS ON SYSUT3                 00096001
                                    97 *                                                                     00097001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                        00080          98 READM   EQU   X'80'                        UNCHECKED READ OPERATION        00098001
                        00040          99 WRITEM  EQU   X'40'                        UNCHECKED WRITE OPERATION       00099001
                        00020         100 READC   EQU   X'20'                        CHECKED READ OPERATION          00100001
                        00010         101 WRITEC  EQU   X'10'                        CHECKED WRITE OPERATION         00101001
                                      102 *                                                                          00102001
                                      103 *       FOR STATEMENT CLASSIFICATION MASKS                                 00103001
                                      104 *                                                                          00104001
                        00080         105 NOCOUNT  EQU  X'80'                        COUNTING LOOP IMPOSSIBLE        00105001
                        00040         106 NOSUOP  EQU   X'40'                        NO SUBSCRIPT OPTIMIZATION       00106001
                        00020         107 OUTOFFOR EQU  X'20'                        BRANCH OUT OF FOR STATEMENT     00107001
                        000F0         108 NORMAL  EQU   X'F0'                        NORMAL LOOP                     00108001
                        00008         109 STEPM   EQU   X'08'                        STEP IN FORLIST                 00109001
                        00084         110 WHILEM  EQU   X'84'                        WHILE IN FOR LIST               00110001
                                      111 *                                                                          00111001
                                      112         IEXENTRY 'IEX30000 LEVEL 2.1 &SYSDATE &SYSTIME'                    00112001
                                      113+*                                                                          01-IEXEN
000000 47F0 F026              00026   114+        B     38(,R15)                 BRANCH AROUND ID                  01-IEXEN
000004 21                             115+        DC    AL1(33)                  LENGTH OF IDENTIFIER              01-IEXEN
000005 C9C5E7F3F0F0F0F0               116+        DC    CL33'IEX30000 LEVEL 2.1 08/17/12 13.13'                   +01-IEXEN
                                        +                                                IDENTIFIER              01-IEXEN
                                      117 *                                                                          00113001
                 R:ABC  00000         118         USING IEX30000,R10,R11,R12                                         00114001
000026 18AF                           119         LR    R10,R15                                                      00115001
000028 41B0 F800              00800   120         LA    R11,2048(,R15)                                               00116001
00002C 41B0 B800              00800   121         LA    R11,2048(,R11)                                               00117001
000030 41C0 B800              00800   122         LA    R12,2048(,R11)                                               00118001
000034 41C0 C800              00800   123         LA    R12,2048(,R12)                                               00119001
                                      124 *                                                                          00120001
                   R:D  00000         125         USING WORKAREA,R13                                                 00121001
                                      126 *                                                                          00122001
000038 4150 A5CC              005CC   127         LA    R5,TERM1                     ERROR EXIT ADDR                 00123001
00003C 5050 D090              00090   128         ST    R5,ERET                                                      00124001
000040 4150 A4E0              004E0   129         LA    R5,LOMEGA6                   PROVIDE EOD ADDR                00125001
000044 5050 D070              00070   130         ST    R5,EODUT1                    FOR UT1                         00126001
000048 D201 D09C BF54 0009C 01F54     131         MVC   SEMCNT,ZERO                  ZERO SEMICOLON COUNTER          00127001
                                      132 *                                                                          00128001
                                      133         SPIE  INTERUPT,((1,7),9,11,12,15)                                  00129001
00004E 0700                           134+        CNOP  0,4                    ALIGN PICA TO FULLWORD BOUNDARY    S   01-SPIE
000050 4510 A05A              0005A   135+        BAL   1,*+10                 ADDRESS AND BYPASS THE PICA        S   01-SPIE
000054 00                             136+        DC    BL1'00000000'                                 PROGRAM MASKS   01-SPIE
000055 001F42                         137+        DC    AL3(INTERUPT)          EXIT ROUTINE ADDRESS               S   01-SPIE
000058 7F59                           138+        DC    BL2'0111111101011001'                                         +01-SPIE
                                        +                                    THE INTERRUPT MASK BYTES 1 AND 2        01-SPIE
00005A 0A0E                           139+        SVC   14                     ISSUE THE SPIE SVC                      01-SPIE
                                      140 *                                                                          00130001
00005C 5010 C160              02160   141         ST    R1,OLDSPIE                   SAVE ADDR OF OLD PICA           00131001
                                      142 *                                                                          00132001
                                      143 *       ALLOCATE STORAGE FOR TABLESD                                       00133001
                                      144 *                                                                          00134001
000060 4800 BF76              01F76   145         LH    R0,KH4096                    CONSTANT POOL SIZE              00135001
000064 5A00 D0EC              000EC   146         A     R0,ITAB30S                   ITABSIZE                        00136001
000068 5A00 D0E0              000E0   147         A     R0,SRCE1S                    INPUT BUFFER SIZE               00137001
00006C 5A00 D0E0              000E0   148         A     R0,SRCE3S                    OUTPUT BUFFER SIZE              00138001
000070 5A00 D0E0              000E0   149         A     R0,SRCE3S                    OUTPUT BUFFER SIZE              00139001
000074 5A00 D0F0              000F0   150         A     R0,CRIDTABS                  CRIDTAB SIZE                    00140001
000078 5A00 D0F4              000F4   151         A     R0,SUTAB30S                  SUTAB SIZE                      00141001
00007C 5A00 D0F8              000F8   152         A     R0,LVTAB30S                  LVTAB SIZE                      00142001
000080 4A00 BF60              01F60   153         AH    R0,KH8                       RECORD KEY LENGTH               00143001
000084 5000 C164              02164   154         ST    R0,TABSIZE                   SAVE TABLE AREA LENGTH          00144001
                                      155 *                                                                          00145001
                                      156         GETMAIN R,LV=(0)                   ALLOCATE STORAGE                00146001
                                      157+*       OS/VS2 RELEASE 4 VERSION -- 10/21/75                               01-GETMA
000088 4510 A08C              0008C   158+        BAL   1,*+4                                INDICATE GETMAIN      01-GETMA
00008C 0A0A                           159+        SVC   10                                   ISSUE GETMAIN SVC     01-GETMA
                                      160 *                                                                          00147001
00008E 4150 A530              00530   161         LA    R5,TERM2                     ERROR RETURN ADDR               00148001
000092 5050 D090              00090   162         ST    R5,ERET                                                      00149001
000096 5010 C0D4              020D4   163         ST    R1,ZKOPOOL                   CONSTANT POOL START ADDR        00150001
00009A 4A10 BF76              01F76   164         AH    R1,KH4096                                                    00151001
00009E 5010 BFF4              01FF4   165         ST    R1,ZIBSTAO                   ITAB START ADDR                 00152001
0000A2 5A10 D0EC              000EC   166         A     R1,ITAB30S                                                   00153001
0000A6 5010 BFCC              01FCC   167         ST    R1,ZIBREAD                   SECOND INPUT BUFFER START ADDR  00154001
0000AA 5A10 D0E0              000E0   168         A     R1,SRCE1S                                                    00155001
0000AE 5010 BFD0              01FD0   169         ST    R1,ZOBWORK                   OUTPUT BUFFER START ADDR        00156001
0000B2 5A10 D0E0              000E0   170         A     R1,SRCE3S                                                    00157001
0000B6 5010 BFD4              01FD4   171         ST    R1,ZOBWRITE                  OUTPUT BUFFER START ADDR        00158001
0000BA 5A10 D0E0              000E0   172         A     R1,SRCE3S                                                    00159001
0000BE 5010 C0D0              020D0   173         ST    R1,ZFOCRI                    CRIDTAB START ADDR              00160001
0000C2 5A10 D0F0              000F0   174         A     R1,CRIDTABS                                                  00161001
0000C6 5010 BF9C              01F9C   175         ST    R1,SUSTRT                    SUTAB START ADDR                00162001
0000CA 5A10 D0F4              000F4   176         A     R1,SUTAB30S                                                  00163001
0000CE 4110 1004              00004   177         LA    R1,4(,R1)                                                    00164001
0000D2 5010 BFB8              01FB8   178         ST    R1,LVSTRT                    LVTAB START ADDR                00165001
                                      179 *                                                                          00166001
                                      180 *       INITIALIZE INPUT BUFFERS                                           00167001
                                      181 *                                                                          00168001
0000D6 5830 D0C8              000C8   182         L     R3,SRCE1ADD                  ADDR OF FIRST INPUT BUFFER      00169001
0000DA 5030 BFC8              01FC8   183         ST    R3,ZIBRUN                                                    00170001
0000DE 9140 D082        00082         184         TM    COMPFLGS+2,SPIC              SOURCE PROG IN STORAGE ?        00171001
0000E2 4710 A0EA              000EA   185         BO    INCORE                       YES                             00172001
0000E6 45F0 B346              01346   186         BAL   R15,ICHAI                    READ FIRST RECORD               00173001
                                      187 *                                                                          00174001
                                      188 *       ITAB POINTERS INITIALIZATION                                       00175001
                                      189 *                                                                          00176001
0000EA 5810 BFF4              01FF4   190 INCORE  L     R1,ZIBSTAO                   ITAB START ADDR                 00177001
0000EE D2FF 1000 C4AC 00000 024AC     191         MVC   0(256,R1),FIXITAB            INSERT ITAB FIXED PART          00178001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0000F4 D23E 1100 C5AC 00100 025AC   192          MVC   256(FIXITABL-256,R1),FIXITAB+256                         00179001
0000FA 4150 1134            00134   193          LA    R5,FIXITABL-11(,R1)      R5 -> LAST FIXED ENTRY          00180001
0000FE 5050 BFFC            01FFC   194          ST    R5,ZCURITEN              STORE IN ZCURITEN               00181001
000102 4150 500B            0000B   195          LA    R5,11(,R5)               ADDR FIRST FREE ITAB ENTRY      00182001
000106 5050 C000            02000   196          ST    R5,ZITREC                                                00183001
00010A 5A10 D0EC            000EC   197          A     R1,ITAB30S               ITAB END ADDR PLUS 1            00184001
00010E 5010 C004            02004   198          ST    R1,ZITEND                                                00185001
000112 5810 D06C            0006C   199          L     R1,AUT3DCB               R1 -> SYSUT3 DCB                00186001
                                    200 *                                                                       00187001
                                    201          NOTE  (1)                      ID OF LAST ITAB BLOCK           00188001
000116 58F0 1054            00054   202+         L     15,84(0,1)                         LOAD NOTE  RTN ADDRESS 01-NOTE
00011A 05EF                         203+         BALR  14,15                              LINK TO NOTE  ROUTINE  01-NOTE
                                    204 *                                                                       00189001
00011C 5010 D0D0            000D0   205          ST    R1,SULTSTRT              TRANSFER TO SUBSCRIPT HANDLING  00190001
000120 5010 C0B8            020B8   206          ST    R1,NOTEW                 PREPARE WRITE OF SUTAB OR LVTAB 00191001
000124 5850 D06C            0006C   207          L     R5,AUT3DCB               R5 -> SYSUT3 DCB                00192001
                                    208 *                                                                       00193001
                                    209          CLOSE ((R5),REREAD),TYPE=T     TEMPORARY CLOSE                 00194001
000128                              210+         CNOP  0,4                                ALIGN LIST TO FULLWORD 01-CLOSE
000128 4510 A130            00130   211+         BAL   1,*+8                              LOAD REG1 W/LIST ADDR  01-CLOSE
00012C 00000000                     212+         DC    A(0)                               OPTION AND DCB ADDRESS 01-CLOSE
000130 5051 0000            00000   213+         ST    R5,0(1,0)                          STORE DCB ADDRESS      01-CLOSE
000134 9290 1000      00000         214+         MVI   0(1),144                           MOVE IN OPTION BYTE    01-CLOSE
000138 0A17                         215+         SVC   23                                 ISSUE TCLOSE SVC       01-CLOSE
                                    216 *                                                                       00195001
00013A 45F0 B4BC            014BC   217          BAL   R15,ITABREAD             READ FIRST ITAB RECORD          00196001
                                    218 *                                                                       00197001
                                    219 *        INITIALIZE OUTPUT BUFFERS                                      00198001
                                    220 *                                                                       00199001
00013E 5840 BFD0            01FD0   221          L     R4,ZOBWORK               START OF ACTIVE OUTPUT BUFFER   00200001
000142 5850 D0E0            000E0   222          L     R5,SRCE3S                LENGTH OF OUTPUT BUFFER         00201001
000146 4B50 BF68            01F68   223          SH    R5,KH12                  SET BUFFER END PTRS             00202001
00014A 1A54                         224          AR    R5,R4                                                    00203001
00014C 5050 BFEC            01FEC   225          ST    R5,ZFILE9                                                00204001
000150 4150 5003            00003   226          LA    R5,3(,R5)                                                00205001
000154 5050 BFE8            01FE8   227          ST    R5,ZFILE6                                                00206001
000158 4150 5001            00001   228          LA    R5,1(,R5)                                                00207001
00015C 5050 BFE4            01FE4   229          ST    R5,ZFILE5                                                00208001
000160 4150 5002            00002   230          LA    R5,2(,R5)                                                00209001
000164 5050 BFE0            01FE0   231          ST    R5,ZFILE3                                                00210001
000168 4150 5001            00001   232          LA    R5,1(,R5)                                                00211001
00016C 5050 BFDC            01FDC   233          ST    R5,ZFILE2                                                00212001
000170 4150 5001            00001   234          LA    R5,1(,R5)                                                00213001
000174 5050 BFD8            01FD8   235          ST    R5,ZFILE1                                                00214001
000178 0640                         236          BCTR  R4,0                                                     00215001
                                    237 *                                                                       00216001
                                    238 *        CRIDTAB AND FSTAB INITIALIZATION                               00217001
                                    239 *                                                                       00218001
00017A 5810 C0D0            020D0   240          L     R1,ZFOCRI                CRIDTAB START ADDR              00219001
00017E 4B10 BF62            01F62   241          SH    R1,KH9                   INITIALIZE PTRS                 00220001
000182 5010 C0C4            020C4   242          ST    R1,PFANO                                                 00221001
000186 5010 C0C0            020C0   243          ST    R1,PFA                   CURRENT CRIDTAB PTR             00222001
00018A 5A10 D0F0            000F0   244          A     R1,CRIDTABS              GET ADDR OF LAST ENTRY          00223001
00018E 5010 C0C8            020C8   245          ST    R1,PFAMAX                END PTR                         00224001
000192 9200 D478      00478         246          MVI   ZFOSTA,0                 ZERO FSTAB                      00225001
000196 D2FD D479 D478 00479 00478   247          MVC   ZFOSTA+1(254),ZFOSTA                                     00226001
00019C 4150 D477            00477   248          LA    R5,FSTAB-1               START ADDR OF FSTAB -1          00227001
0001A0 5050 C0CC            020CC   249          ST    R5,ZFSPTR                INITIALIZE FORSTATEMENT ZERO    00228001
                                    250 *                                                                       00229001
                                    251 *        SUTAB INITIALIZATION                                           00230001
                                    252 *                                                                       00231001
0001A4 5810 BF9C            01F9C   253          L     R1,SUSTRT                SUTAB START ADDR                00232001
0001A8 D203 1000 BFA0 00000 01FA0   254          MVC   0(4,R1),SUKEY            SET SUTAB KEY                   00233001
0001AE 4B10 BF64            01F64   255          SH    R1,KH10                  INITIALIZE PTRS                 00234001
0001B2 5010 BF94            01F94   256          ST    R1,ZSUDAD                START PTR                       00235001
0001B6 5010 BF90            01F90   257          ST    R1,ZSUTAPO               CURRENT PTR                     00236001
0001BA 5A10 D0F4            000F4   258          A     R1,SUTAB30S                                              00237001
0001BE 5010 BF98            01F98   259          ST    R1,ZSUTMAX               END PTR                         00238001
                                    260 *                                                                       00239001
                                    261 *        LVTAB INITIALIZATION                                           00240001
                                    262 *                                                                       00241001
0001C2 5810 BFB8            01FB8   263          L     R1,LVSTRT                LVTAB START ADDR                00242001
0001C6 D203 1000 BFBC 00000 01FBC   264          MVC   0(4,R1),LVKEY            SET LVTAB KEY                   00243001
0001CC 5010 BFAC            01FAC   265          ST    R1,ZLESTA                START PTR                       00244001
0001D0 5010 BFB0            01FB0   266          ST    R1,ZLEVA                 CURRENT PTR                     00245001
0001D4 5A10 D0F8            000F8   267          A     R1,LVTAB30S                                              00246001
0001D8 5010 BFB4            01FB4   268          ST    R1,ZLEMAX                END PTR                         00247001
                                    269 *                                                                       00248001
                                    270 *        LITERAL HANDLING INITIALIZATION                                00249001
                                    271 *                                                                       00250001
0001DC 9102 D080      00080         272          TM    COMPFLGS,LNG             LONG PRECISION ?                00251001
0001E0 4770 A1F4            001F4   273          BNZ   INLIT2                   YES                             00252001
0001E4 4150 0004            00004   274          LA    R5,4                                                     00253001
0001E8 5050 C128            02128   275          ST    R5,LREAL                                                 00254001
0001EC 4150 0007            00007   276          LA    R5,7                                                     00255001
0001F0 5050 C12C            0212C   277          ST    R5,NREAL                 MAXIMAL PRECISION               00256001
                                    278 *                                                                       00257001
                                    279 *        CONSTANT POOL INITALIZATION                                    00258001
                                    280 *                                                                       00259001
0001F4 5810 C0D4            020D4   281 INLIT2   L     R1,ZKOPOOL               CONSTANT POOL START ADDR        00260001
0001F8 4850 BF76            01F76   282          LH    R5,KH4096                LENGTH OF CONSTANT POOL         00261001
0001FC 1A51                         283          AR    R5,R1                    CONSTANT POOL END ADDR          00262001
0001FE 5050 C0D8            020D8   284          ST    R5,ZKOPEND               END PTR                         00263001
000202 5A10 D0A4            000A4   285          A     R1,PRPT                                                  00264001
000206 5010 C118            02118   286          ST    R1,ZWP                   WORD PTR                        00265001
00020A 5010 C11C            0211C   287          ST    R1,ZDWP                  DOUBLE WORD PTR                 00266001
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 Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

00020E 5010 C0DC            020DC   288          ST    R1,ZLITSTA               START ADDR OF ACTIVE POOL       00267001
000212 4A10 C0E6            020E6   289          AH    R1,TXTPUT                TXT OUTPUT PTR                  00268001
000216 5010 C0E0            020E0   290          ST    R1,ZTEXTCO                                               00269001
00021A D201 C0E4 D09E 020E4 0009E   291          MVC   ZKBNMAX(2),PBN           PREPARE CONSTANT POOL EXCHANGE  00270001
000220 D201 D0A0 BF54 000A0 01F54   292          MVC   KBN(2),ZERO              CURRENT POOL NUMBER             00271001
                                    293 *                                                                       00272001
                                    294 *        START READ INTO ALTERNATE INPUT BUFFER IF NECESSARY            00273001
                                    295 *                                                                       00274001
000226 9140 D082      00082         296          TM    COMPFLGS+2,SPIC          SOURCE PROG IN STORAGE ?        00275001
00022A 4710 A232            00232   297          BO    INITEND                  YES                             00276001
00022E 45F0 B2EE            012EE   298          BAL   R15,ICHA                                                 00277001
000232 94F7 D082      00082         299 INITEND  NI    COMPFLGS+2,255-NOSC      SET SEMICOLON COUNTER VALID     00278001
000236 9104 D080      00080         300          TM    COMPFLGS,PROC            PRECOMPILED PROCEDURE ?         00279001
00023A 4780 A24A            0024A   301          BZ    GENTEST                  NO                              00280001
00023E 45F0 B352            01352   302          BAL   R15,ITABMOVE             YES, GET ITAB RECORD            00281001
000242 47F0 A24A            0024A   303          B     GENTEST                                                  00282001
                                    304 *                                                                       00283001
000246 4130 3001            00001   305 GENTEST1 LA    R3,1(,R3)                                                00284001
00024A 1B22                         306 GENTEST  SR    R2,R2                                                    00285001
00024C DD4F 3000 C278 00000 02278   307          TRT   0(80,R3),GENER                                           00286001
000252 47F2 A252            00252   308          B     *(R2)                                                    00287001
000256 47F0 A7DA            007DA   309          B     LETTER                   + 04                            00288001
00025A 47F0 B6B0            016B0   310          B     DIGIT19                  + 08                            00289001
00025E 47F0 B754            01754   311          B     DIGIT0                   + 12                            00290001
000262 47F0 B7D0            017D0   312          B     DECPOIN                  + 16                            00291001
000266 47F0 B86C            0186C   313          B     SCAFACT                  + 20                            00292001
00026A 47F0 A2BE            002BE   314          B     QUOTE                    + 24                            00293001
00026E 47F0 A314            00314   315          B     BETA                     + 28                            00294001
000272 47F0 A350            00350   316          B     PIPHI                    + 32                            00295001
000276 47F0 A3B0            003B0   317          B     FOR                      + 36                            00296001
00027A 47F0 A3F2            003F2   318          B     EPSILON                  + 40                            00297001
00027E 47F0 A418            00418   319          B     ETA                      + 44                            00298001
000282 47F0 A42C            0042C   320          B     DO                       + 48                            00299001
000286 47F0 A44E            0044E   321          B     WHILE                    + 52                            00300001
00028A 47F0 A47A            0047A   322          B     SEMIDELT                 + 56                            00301001
00028E 47F0 A656            00656   323          B     OPBRACK                  + 60                            00302001
000292 47F0 A6FC            006FC   324          B     COMMA                    + 64                            00303001
000296 47F0 A75E            0075E   325          B     CLOBRACK                 + 68                            00304001
00029A 47F0 A64E            0064E   326          B     ZETA                     + 72                            00305001
00029E 47F0 A628            00628   327          B     GAMMA                    + 76                            00306001
0002A2 47F0 A4C0            004C0   328          B     OMEGA                    + 80                            00307001
0002A6 47F0 A430            00430   329          B     OTHOP                    + 84                            00308001
0002AA 47F0 A842            00842   330          B     RHO                      + 88                            00309001
0002AE 47F0 A45A            0045A   331          B     STEP                     + 92                            00310001
0002B2 47F0 A4B2            004B2   332          B     ARRAY                    + 96                            00311001
0002B6 47F0 A4AA            004AA   333          B     SWITCH                   +100                            00312001
0002BA 47F0 A466            00466   334          B     DIPOW                    +104                            00313001
                                    335 *                                                                       00314001
                                    336 *        STRING OR LOGICAL VALUE                                        00315001
                                    337 *                                                                       00316001
0002BE 5940 BFE4            01FE4   338 QUOTE    C     R4,ZFILE5                OUTPUT BUFFER EXCHANGE ?        00317001
0002C2 4720 A2E0            002E0   339          BH    LQUOT2                   YES                             00318001
0002C6 D204 4001 3001 00001 00001   340 LQUOT3   MVC   1(5,R4),1(R3)            OUTPUT INTERNAL NAME            00319001
0002CC 4130 3006            00006   341          LA    R3,6(,R3)                                                00320001
0002D0 952E 3000      00000         342          CLI   0(R3),X'2E'              FOLLOWS AN OPERATOR ?           00321001
0002D4 47B0 A2E8            002E8   343          BNL   LQUOT1                   PROBABLY NOT, MIGHT BE ZETA     00322001
0002D8 4140 4005            00005   344 LQUOT5   LA    R4,5(,R4)                STEP OUTPUT PTR                 00323001
0002DC 47F0 A24A            0024A   345          B     GENTEST                  BRANCH TO GENTEST               00324001
                                    346 *                                                                       00325001
0002E0 45F0 B1AC            011AC   347 LQUOT2   BAL   R15,OUCHA                BRANCH TO SUBROUTINE OUCHA      00326001
0002E4 47F0 A2C6            002C6   348          B     LQUOT3                   BRANCH TO LQUOT3                00327001
                                    349 *                                                                       00328001
0002E8 952F 3000      00000         350 LQUOT1   CLI   0(R3),XFZETA             ZETA ?                          00329001
0002EC 4770 A2FC            002FC   351          BNE   LQUOT4                   NO, GIVE ERROR MESSAGE          00330001
0002F0 45F0 B2EE            012EE   352          BAL   R15,ICHA                 CHANGE INPUT BUFFER             00331001
0002F4 952E 3000      00000         353          CLI   0(R3),X'2E'              FOLLOWS OPERATOR ?              00332001
0002F8 4740 A2D8            002D8   354          BL    LQUOT5                   YES                             00333001
0002FC D205 C081 C076 02081 02076   355 LQUOT4   MVC   ZIDEX(6),ZPOINT          REPLACE OPERAND BY SIX POINTS   00334001
000302 4180 C087            02087   356          LA    R8,ZIDEX+6                                               00335001
000306 4100 C08D            0208D   357          LA    R0,ZIDEX+12                                              00336001
00030A D201 C014 BF78 02014 01F78   358          MVC   ZERRONU,INVOP                                            00337001
000310 47F0 B4CE            014CE   359          B     INCOROP                  INCORRECT OPERAND ERROR ROUTINE 00338001
                                    360 *                                                                       00339001
                                    361 *        PROGRAM BLOCK BEGIN                                            00340001
                                    362 *                                                                       00341001
000314 95F0 A7DB      007DB         363 BETA     CLI   LETTER+1,X'F0'           PROCEDURE BLOCK TO READ ?       00342001
000318 4780 A348            00348   364          BE    LBETA4                   YES                             00343001
00031C 45F0 B352            01352   365 BETA1    BAL   R15,ITABMOVE             READ ITAB BLOCK                 00344001
000320 5940 BFDC            01FDC   366 LBETA2   C     R4,ZFILE2                COMPARE ZOUT WITH ZFILE(2)      00345001
000324 4720 A340            00340   367          BH    LBETA1                   BRANCH IF HIGH                  00346001
000328 D201 4001 3000 00001 00000   368 LBETA3   MVC   1(2,R4),0(R3)                                            00347001
00032E 4140 4002            00002   369          LA    R4,2(,R4)                INCR ZOUT BY 2                  00348001
000332 D201 C074 3002 02074 00002   370          MVC   ZIGN(2),2(R3)            IGN IS RECOGNIZED AND STORED    00349001
000338 4130 3004            00004   371          LA    R3,4(,R3)                INCR ZIN BY 4                   00350001
00033C 47F0 A24A            0024A   372          B     GENTEST                  BRANCH TO GENTEST               00351001
                                    373 *                                                                       00352001
000340 45F0 B1AC            011AC   374 LBETA1   BAL   R15,OUCHA                BRANCH TO SUBROUTINE OUCHA      00353001
000344 47F0 A328            00328   375          B     LBETA3                   BRANCH TO LBETA 2               00354001
                                    376 *                                                                       00355001
000348 45F0 B34E            0134E   377 LBETA4   BAL   R15,ITABMOP              READ PROCEDURE BLOCK            00356001
00034C 47F0 A31C            0031C   378          B     BETA1                                                    00357001
                                    379 *                                                                       00358001
                                    380 *        PROCEDURE BLOCK BEGIN                                          00359001
                                    381 *                                                                       00360001
000350 940F A8A9      008A9         382 PIPHI    NI    IDENT4+1,X'0F'           PROC HEAD SWITCH ON             00361001
000354 95F0 A7DB      007DB         383          CLI   LETTER+1,X'F0'           PROCEDURE BLOCK TO READ ?       00362001
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  Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

000358 4780 A3A8            003A8   384          BE    LPIPHI6                                              00363001
00035C D201 C074 3001 02074 00001   385 PIPHI1   MVC   ZIGN(2),1(R3)           SAVE CURRENT IGN             00364001
000362 5940 BFE8            01FE8   386          C     R4,ZFILE6               SPACE IN OUTPUT BUFFER ?     00365001
000366 4720 A3A0            003A0   387          BH    LPIPHI1                 BRANCH IF HIGH               00366001
00036A D200 4001 3000 00001 00000   388 LPIPHI2  MVC   1(1,R4),0(R3)           OPERATOR IS MOVED TO O-BUFFER 00367001
000370 4140 4001            00001   389          LA    R4,1(,R4)               INCR ZOUT BY 1               00368001
000374 4130 3003            00003   390          LA    R3,3(,R3)               INCR ZIN BY 3                00369001
000378 9540 3000      00000         391 LPIPHI3  CLI   0(R3),XFA               LETTER FOLLOWS IN SOURCE INPUT ? 00370001
00037C 4740 A388            00388   392          BL    LPIPHI4                 NO                           00371001
000380 96F0 A7DB      007DB         393          OI    LETTER+1,X'F0'          YES, SET PROCEDURE SWITCH    00372001
000384 47F0 A7DA            007DA   394          B     LETTER                  GET IDENT AND READ ITAB      00373001
                                    395 *                                                               00374001
000388 952F 3000      00000         396 LPIPHI4  CLI   0(R3),XFZETA            ZETA IN SOURCE INPUT ?       00375001
00038C 4780 A398            00398   397          BE    LPIPHI5                 YES                          00376001
000390 45F0 B352            01352   398          BAL   R15,ITABMOVE            NO, READ ITAB BLOCK          00377001
000394 47F0 A24A            0024A   399          B     GENTEST                                              00378001
                                    400 *                                                               00379001
000398 45F0 B2EE            012EE   401 LPIPHI5  BAL   R15,ICHA                GET NEXT INPUT RECORD        00380001
00039C 47F0 A378            00378   402          B     LPIPHI3                                              00381001
                                    403 *                                                               00382001
0003A0 45F0 B1AC            011AC   404 LPIPHI1  BAL   R15,OUCHA               BRANCH TO SUBROUTINE OUCHA   00383001
0003A4 47F0 A36A            0036A   405          B     LPIPHI2                 BRANCH TO LPIPHI2            00384001
                                    406 *                                                               00385001
0003A8 45F0 B34E            0134E   407 LPIPHI6  BAL   R15,ITABMOP             READ PROCEDURE BLOCK         00386001
0003AC 47F0 A35C            0035C   408          B     PIPHI1                                               00387001
                                    409 *                                                               00388001
                                    410 *        FOR STATEMENT BEGIN                                    00389001
                                    411 *                                                               00390001
0003B0 92C0 C0B1      020B1         412 FOR      MVI   ZFORTEST,X'C0'          ZFORTEST IS SET TO X'C0'     00391001
0003B4 5850 C0CC            020CC   413          L     R5,ZFSPTR               UPDATE PTR TO FSTAB ENTRY    00392001
0003B8 4150 5001            00001   414          LA    R5,1(,R5)                                            00393001
0003BC 5050 C0CC            020CC   415          ST    R5,ZFSPTR                                            00394001
0003C0 4160 D478            00478   416          LA    R6,FSTAB                GET FOR STATEMENT NUMBER     00395001
0003C4 1B56                         417          SR    R5,R6                                                00396001
0003C6 4250 C0B3            020B3   418          STC   R5,ZFSN                                              00397001
0003CA D201 C074 3001 02074 00001   419 LFOR3    MVC   ZIGN(2),1(R3)           IGN IS RECOGNIZED AND STORED 00398001
0003D0 5940 BFD8            01FD8   420          C     R4,ZFILE1               TEST IF SPACE IN OUTPUT BUFFER 00399001
0003D4 4720 A3EA            003EA   421          BH    LFOR1                   BRANCH IF HIGH               00400001
0003D8 D200 4001 3000 00001 00000   422 LFOR4    MVC   1(1,R4),0(R3)                                        00401001
0003DE 4140 4001            00001   423          LA    R4,1(,R4)               INCR ZOUT                    00402001
0003E2 4130 3003            00003   424          LA    R3,3(,R3)               INCR ZIN BY 3                00403001
0003E6 47F0 A24A            0024A   425          B     GENTEST                 BRANCH TO GENTEST            00404001
                                    426 *                                                               00405001
0003EA 45F0 B1AC            011AC   427 LFOR1    BAL   R15,OUCHA               CALL SUBROUTINE OUCHA        00406001
0003EE 47F0 A3D8            003D8   428          B     LFOR4                   BRANCH TO LFOR2              00407001
                                    429 *                                                               00408001
                                    430 *        END OF PROGRAM OR PROCEDURE BLOCK                      00409001
                                    431 *                                                               00410001
0003F2 95F0 A7DB      007DB         432 EPSILON  CLI   LETTER+1,X'F0'          ITAB BLOCK TO READ ?         00411001
0003F6 4780 A410            00410   433          BE    EPSILON2                YES                          00412001
0003FA 5860 BFFC            01FFC   434 EPSILON1 L     R6,ZCURITEN             ADDR LAST ITAB ENTRY         00413001
0003FE 4B60 C008            02008   435          SH    R6,ZCURITLE             ZCURITEN = ZCURITEN - ZCURITLE 00414001
000402 5060 BFFC            01FFC   436          ST    R6,ZCURITEN             ZCURITEN IS STORED           00415001
000406 D201 C008 6011 02008 00011   437          MVC   ZCURITLE(2),17(R6)      ZCURITLE IS UPDATED          00416001
00040C 47F0 A320            00320   438          B     LBETA2                  BRANCH TO LBETA2             00417001
                                    439 *                                                               00418001
000410 45F0 B34E            0134E   440 EPSILON2 BAL   R15,ITABMOP             READ ITAB BLOCK              00419001
000414 47F0 A3FA            003FA   441          B     EPSILON1                                             00420001
                                    442 *                                                               00421001
                                    443 *        FOR STATEMENT END                                      00422001
                                    444 *                                                               00423001
000418 9200 C0B1      020B1         445 ETA      MVI   ZFORTEST,0              ZERO ZFORTEST                00424001
00041C 9180 D080      00080         446          TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?          00425001
000420 4710 A3CA            003CA   447          BO    LFOR3                   YES                          00426001
000424 45F0 AD46            00D46   448          BAL   R15,CRIFODEL            CALL CRIFODEL                00427001
000428 47F0 A3CA            003CA   449          B     LFOR3                   BRANCH TO LFOR3              00428001
                                    450 *                                                               00429001
                                    451 *        FOR LIST END                                           00430001
                                    452 *                                                               00431001
00042C 9200 C0B1      020B1         453 DO       MVI   ZFORTEST,0              ZERO ZFORTEST                00432001
000430 5940 BFD8            01FD8   454 LDO3     C     R4,ZFILE1               COMPARE ZOUT WITH ZFILE      00433001
                      00430         455 OTHOP    EQU   LDO3                                                 00434001
000434 4720 A446            00446   456          BH    LDO1                    HIGH, BRANCH                 00435001
000438 D200 4001 3000 00001 00000   457 LDO2     MVC   1(1,R4),0(R3)           OPERATOR IS MOVED TO O BUFFER 00436001
00043E 4140 4001            00001   458          LA    R4,1(,R4)               INCR ZOUT                    00437001
000442 47F0 A246            00246   459          B     GENTEST1                                             00438001
                                    460 *                                                               00439001
000446 45F0 B1AC            011AC   461 LDO1     BAL   R15,OUCHA               BRANCH TO SUBROUTINE OUCHA   00440001
00044A 47F0 A438            00438   462          B     LDO2                    BRANCH TO LDO2               00441001
                                    463 *                                                               00442001
                                    464 *        WHILE                                                  00443001
                                    465 *                                                               00444001
00044E 5850 C0CC            020CC   466 WHILE    L     R5,ZFSPTR               ADDR FSTAB ENTRY             00445001
000452 9684 5000      00000         467          OI    0(R5),WHILEM            INDICATE 'WHILE HAS APPEARED' 00446001
000456 47F0 A430            00430   468          B     LDO3                                                 00447001
                                    469 *                                                               00448001
                                    470 *        STEP OPERATOR                                          00449001
                                    471 *                                                               00450001
00045A 5850 C0CC            020CC   472 STEP     L     R5,ZFSPTR               ADDR FSTAB ENTRY             00451001
00045E 9608 5000      00000         473          OI    0(R5),STEPM             INDICATE 'STEP HAS APPEARED' 00452001
000462 47F0 A430            00430   474          B     LDO3                                                 00453001
                                    475 *                                                               00454001
                                    476 *        DIVIDE AND POWER ROUTINE                               00455001
                                    477 *                                                               00456001
000466 9500 C0B1      020B1         478 DIPOW    CLI   ZFORTEST,0              OPERATOR IN FOR LIST ?       00457001
00046A 4780 A430            00430   479          BE    OTHOP                   NO, MOVE TO OUTPUT STREAM    00458001
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  Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00046E 5850 C0CC             020CC   480          L     R5,ZFSPTR              YES, ADDR FSTAB ENTRY          00459001
000472 9680 5000       00000         481          OI    0(R5),NOCOUNT          COUNTING LOOP IMPOSSIBLE       00460001
000476 47F0 A430             00430   482          B     OTHOP                  MOVE TO OUTPUT STREAM          00461001
                                     483 *                                                                    00462001
                                     484 *        SEMICOLON OR DELTA                                          00463001
                                     485 *                                                                    00464001
00047A D201 D09C 3001 0009C 00001    486 SEMIDELT MVC   SEMCNT,1(R3)           SAVE SEMICOLON COUNTER         00465001
000480 96F0 A8A9       008A9         487          OI    IDENT4+1,X'F0'         PROC HEAD SWITCH OFF           00466001
000484 5940 BFE0             01FE0   488          C     R4,ZFILE3              COMPARE ZOUT WITH ZFILE(3)     00467001
000488 4720 A4A2             004A2   489          BH    LSEM1                  HIGH, BRANCH                   00468001
00048C D202 4001 3000 00001 00000    490 LSEM2    MVC   1(3,R4),0(R3)          OPERATOR,SC ARE MOVED TO O-BUFF 00469001
000492 4140 4003             00003   491          LA    R4,3(,R4)              ZOUT IS INCREASED BY 3         00470001
000496 4130 3003             00003   492          LA    R3,3(,R3)              ZIN IS INCREASED BY 3          00471001
00049A 9200 C0AE       020AE         493          MVI   STATUS,0               TURN OFF SWITCH OR ARRAY BITS  00472001
00049E 47F0 A24A             0024A   494          B     GENTEST                BRANCH TO GENTEST              00473001
                                     495 *                                                                    00474001
0004A2 45F0 B1AC             011AC   496 LSEM1    BAL   R15,OUCHA              CALL SUBROUTINE OUCHA          00475001
0004A6 47F0 A48C             0048C   497          B     LSEM2                  BRANCH TO LSEM2                00476001
                                     498 *                                                                    00477001
0004AA 9640 C0AE       020AE         499 SWITCH   OI    STATUS,SSWITCH         SET ON SWITCH SWITCH           00478001
0004AE 47F0 A430             00430   500          B     OTHOP                                                 00479001
                                     501 *                                                                    00480001
0004B2 9680 C0AE       020AE         502 ARRAY    OI    STATUS,SARRAY          SET ON ARRAY SWOTCH            00481001
0004B6 D201 C0AC BF54 020AC 01F54    503          MVC   BRCNT(2),ZERO          ZERO BRACKET COUNTER           00482001
0004BC 47F0 A430             00430   504          B     OTHOP                  OUTPUT OPERATOR                00483001
                                     505 *                                                                    00484001
                                     506 *        PROGRAM END                                                 00485001
                                     507 *                                                                    00486001
0004C0 D200 4001 3000 00001 00000    508 OMEGA    MVC   1(1,R4),0(R3)                                         00487001
0004C6 9608 D082       00082         509          OI    COMPFLGS+2,NOSC        SET SEMICOLON COUNTER NOT VALID 00488001
0004CA 9140 D082       00082         510          TM    COMPFLGS+2,SPIC        SOURCE PROG IN STORAGE ?       00489001
0004CE 4710 A4E0             004E0   511          BO    LOMEGA6                YES, BRANCH                    00490001
                                     512 *                                                                    00491001
                                     513          CHECK SREAD                                                 00492001
0004D2 4110 B30C             0130C   514+         LA    1,SREAD                          LOAD PARAMETER REG 1 02-IHBIN
0004D6 58E0 1008             00008   515+         L     14,8(0,1)                PICK UP DCB ADDR             01-CHECK
0004DA 58F0 E034             00034   516+         L     15,52(0,14)              LOAD CHECK ROUTINE ADDR      01-CHECK
0004DE 05EF                          517+         BALR  14,15                    LINK TO CHECK ROUTINE        01-CHECK
                                     518 *                                                                    00493001
0004E0 5850 D064             00064   519 LOMEGA6  L     R5,AUT1DCB             R5 -> SYSUT1 DCB               00494001
                                     520 *                                                                    00495001
                                     521          CLOSE ((R5))                 CLOSE SYSUT1 FINALY            00496001
0004E4                               522+         CNOP  0,4                              ALIGN LIST TO FULLWORD 01-CLOSE
0004E4 4510 A4EC             004EC   523+         BAL   1,*+8                            LOAD REG1 W/LIST ADDR 01-CLOSE
0004E8 00000000                      524+         DC    A(0)                             OPTION AND DCB ADDRESS 01-CLOSE
0004EC 5051 0000             00000   525+         ST    R5,0(1,0)                        STORE DCB ADDRESS    01-CLOSE
0004F0 9280 1000       00000         526+         MVI   0(1),128                         MOVE IN OPTION BYTE  01-CLOSE
0004F4 0A14                          527+         SVC   20                               ISSUE CLOSE SVC      01-CLOSE
                                     528 *                                                                    00497001
0004F6 D501 BF5A BFF0 01F5A 01FF0    529          CLC   KH1,ZOUTCOT            ZOUTCOT = 1 ?                  00498001
0004FC 4780 A5EA             005EA   530          BE    LOMEGA1                YES, BRANCH                    00499001
000500 4140 4001             00001   531          LA    R4,1(,R4)              SAVE OMEGA FROM OVERLAY        00500001
000504 45F0 B1AC             011AC   532          BAL   R15,OUCHA              WRITE LAST RECORD              00501001
000508 94BF D082       00082         533          NI    COMPFLGS+2,255-SPIC    OUTPUT ON SECONDARY STORAGE    00502001
                                     534 *                                                                    00503001
                                     535          CHECK SWRITE                 CHECK LAST OUTPUT RECORD       00504001
00050C 4110 B238             01238   536+         LA    1,SWRITE                         LOAD PARAMETER REG 1 02-IHBIN
000510 58E0 1008             00008   537+         L     14,8(0,1)                PICK UP DCB ADDR             01-CHECK
000514 58F0 E034             00034   538+         L     15,52(0,14)              LOAD CHECK ROUTINE ADDR      01-CHECK
000518 05EF                          539+         BALR  14,15                    LINK TO CHECK ROUTINE        01-CHECK
                                     540 *                                                                    00505001
                                     541 *        WRITE OUT CONSTANT POOL                                     00506001
                                     542 *                                                                    00507001
00051A 5890 C11C             0211C   543 LOMEGA3  L     R9,ZDWP                ADDR OF FREE BYTE IN CONST POOL 00508001
00051E 1859                          544          LR    R5,R9                                                 00509001
000520 4A50 C0E6             020E6   545          AH    R5,TXTPUT              MORE TXT TO WRITE ?            00510001
000524 5950 C0E0             020E0   546          C     R5,ZTEXTCO                                            00511001
000528 4780 A530             00530   547          BE    LOMEGA2                                               00512001
00052C 45E0 BDD4             01DD4   548          BAL   R14,TXTTRAF            YES, WRITE REST OF CONST POOL  00513001
                                     549 *                                                                    00514001
                       00530         550 LOMEGA2  EQU   *                                                     00515001
                       00530         551 TERM2    EQU   *                                                     00516001
000530 1B55                          552          SR    R5,R5                                                 00517001
000532 4350 C0B3             020B3   553          IC    R5,ZFSN                                               00518001
000536 4050 D578             00578   554          STH   R5,FSNMAX                                             00519001
00053A D201 D57C BFA8 0057C 01FA8    555          MVC   SUCOUNT(2),SUCNT       NUMBER OF SUTAB RECORDS        00520001
000540 D201 D57A BFC4 0057A 01FC4    556          MVC   LVCOUNT(2),LVCNT       NUMBER OF LVTAB RECORDS        00521001
000546 5810 BFA4             01FA4   557          L     R1,SULENGTH            GET FULL LENGTH OF SUTAB       00522001
00054A 5A10 BF90             01F90   558          A     R1,ZSUTAPO                                            00523001
00054E 5B10 BF94             01F94   559          S     R1,ZSUDAD                                             00524001
000552 5010 D584             00584   560          ST    R1,ZSUTEN              LENGTH OF SUTAB                00525001
000556 4780 A5A2             005A2   561          BZ    LOMEGA4                                               00526001
00055A D503 BF90 BF94 01F90 01F94    562          CLC   ZSUTAPO(4),ZSUDAD      ANYTHING IN SUTAB BUFFER ?     00527001
000560 4780 A574             00574   563          BE    LOMEGA5                NO                             00528001
000564 4550 B5D6             015D6   564          BAL   R5,CHECK               CHECK LAST I/O OPERATION ON UT3 00529001
000568 5850 BF9C             01F9C   565          L     R5,SUSTRT              WRITE START ADDR               00530001
00056C 5860 D0F4             000F4   566          L     R6,SUTAB30S            LENGTH OF RECORD               00531001
000570 45F0 B5F8             015F8   567          BAL   R15,WRITE              WRITE                          00532001
                                     568 *                                                                    00533001
000574 5810 BFC0             01FC0   569 LOMEGA5  L     R1,LVLENGTH            GET FULL LENGTH OF LVTAB       00534001
000578 5A10 BFB0             01FB0   570          A     R1,ZLEVA                                              00535001
00057C 5B10 BFAC             01FAC   571          S     R1,ZLESTA                                             00536001
000580 5010 D580             00580   572          ST    R1,ZLEVEN              LENGTH OF LVTAB                00537001
000584 4780 A5A2             005A2   573          BZ    LOMEGA4                                               00538001
000588 D503 BFB0 BFAC 01FB0 01FAC    574          CLC   ZLEVA(4),ZLESTA        ANYTHING IN LVTAB BUFFER ?     00539001
00058E 4780 A5A2             005A2   575          BE    LOMEGA4                NO                             00540001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

000592 4550 B5D6            015D6   576            BAL   R5,CHECK                   CHECK LAST I/O OPERATION ON UT3  00541001
000596 5850 BFB8            01FB8   577            L     R5,LVSTRT                  LVTAB BUFFER START ADDR          00542001
00059A 5860 D0F8            000F8   578            L     R6,LVTAB30S                LENGTH OF LVTAB BUFFER           00543001
00059E 45F0 B5F8            015F8   579            BAL   R15,WRITE                  WRITE                            00544001
                                    580 *                                                                            00545001
0005A2 4550 B5D6            015D6   581 LOMEGA4    BAL   R5,CHECK                   CHECK LAST I/O OPERATION ON UT3  00546001
0005A6 5850 D068            00068   582            L     R5,AUT2DCB                 R5 -> SYSUT2                     00547001
                                    583 *                                                                            00548001
                                    584            CLOSE ((R5),REREAD),TYPE=T       CLOSE SYSUT2 TEMPORARILY         00549001
0005AA 0700                         585+           CNOP  0,4                                  ALIGN LIST TO FULLWORD 01-CLOSE
0005AC 4510 A5B4            005B4   586+           BAL   1,*+8                                LOAD REG1 W/LIST ADDR  01-CLOSE
0005B0 00000000                     587+           DC    A(0)                                 OPTION AND DCB ADDRESS 01-CLOSE
0005B4 5051 0000            00000   588+           ST    R5,0(1,0)                            STORE DCB ADDRESS      01-CLOSE
0005B8 9290 1000      00000         589+           MVI   0(1),144                             MOVE IN OPTION BYTE    01-CLOSE
0005BC 0A17                         590+           SVC   23                                   ISSUE TCLOSE SVC       01-CLOSE
                                    591 *                                                                            00550001
0005BE 5800 C164            02164   592            L     R0,TABSIZE                 RELEASE MAIN STORAGE             00551001
0005C2 5810 C0D4            020D4   593            L     R1,ZKOPOOL                                                  00552001
                                    594 *                                                                            00553001
                                    595            FREEMAIN R,LV=(0),A=(1)                                           00554001
                                    596+*          OS/VS2 RELEASE 3 VERSION  -- 10/25/74                             01-FREEM
0005C6 4110 1000            00000   597+           LA    1,0(0,1)                             CLEAR HI ORDER BYTE    01-FREEM
0005CA 0A0A                         598+           SVC   10                                   ISSUE FREEMAIN SVC     01-FREEM
                                    599 *                                                                            00555001
0005CC 5810 C160            02160   600 TERM1      L     R1,OLDSPIE                                                  00556001
                                    601 *                                                                            00557001
                                    602            SPIE  MF=(E,(1))                                                  00558001
0005D0 0A0E                         603+           SVC   14                 ISSUE THE SPIE SVC                       01-SPIE
                                    604 *                                                                            00559001
                                    605            XCTL  EP=IEX31                   TRANSFER TO NEXT PHASE           00560001
0005D2 0700                         606+           CNOP  0,4                                                         02-IHBIN
0005D4 45F0 A5E8            005E8   607+           BAL   15,*+20            BRANCH AROUND CONSTANTS                  02-IHBIN
0005D8 000005E0                     608+           DC    A(*+8)             ADDR. OF PARM. LIST                      02-IHBIN
0005DC 00000000                     609+           DC    A(0)                DCB ADDRESS PARAMETER                   02-IHBIN
0005E0 C9C5E7F3F1404040             610+           DC    CL8'IEX31'          EP PARAMETER                            02-IHBIN
0005E8 0A07                         611+           SVC   7                                    ISSUE XCTL SVC         01-XCTL
                                    612 *                                                                            00561001
0005EA 9640 D082      00082         613 LOMEGA1    OI    COMPFLGS+2,SPIC            SOURCE PROG IN STORAGE           00562001
0005EE 5810 D0C8            000C8   614            L     R1,SRCE1ADD                ADDR OF RESIDENT BUFFER          00563001
0005F2 5820 BFD0            01FD0   615            L     R2,ZOBWORK                 ADDR OF OUTPUT BUFFER            00564001
0005F6 5850 D0E0            000E0   616            L     R5,SRCE1S                  BUFFER LENGTH                    00565001
0005FA 0650                         617            BCTR  R5,0                                                        00566001
0005FC 1865                         618            LR    R6,R5                                                       00567001
0005FE 8A60 0008            00008   619            SRA   R6,8                       GET MULTIPLE OF 256              00568001
000602 1266                         620            LTR   R6,R6                      MAXIMUM 256 ?                    00569001
000604 4780 A61A            0061A   621            BZ    LOMEGA12                   YES                              00570001
000608 D2FF 1000 2000 00000 00000   622 LOMEGA11   MVC   0(256,R1),0(R2)            MOVE BLOCK OF 256                00571001
00060E 4110 1100            00100   623            LA    R1,256(,R1)                                                 00572001
000612 4120 2100            00100   624            LA    R2,256(,R2)                                                 00573001
000616 4660 A608            00608   625            BCT   R6,LOMEGA11                                                 00574001
00061A 4450 A622            00622   626 LOMEGA12   EX    R5,ONERM                   MOVE REST OF BUFFER              00575001
00061E 47F0 A51A            0051A   627            B     LOMEGA3                                                     00576001
                                    628 *                                                                            00577001
000622 D200 1000 2000 00000 00000   629 ONERM      MVC   0(0,R1),0(R2)              LENGTH IN R5                     00578001
                                    630 *                                                                            00579001
                                    631 *          CODE PROCEDURE                                                    00580001
                                    632 *                                                                            00581001
000628 5940 BFEC            01FEC   633 GAMMA      C     R4,ZFILE9                  COMPARE ZOUT WITH ZFILE9         00582001
00062C 4720 A646            00646   634            BH    LGAMMA1                    HIGH, BRANCH                     00583001
000630 922E 4001      00001         635 LGAMMA2    MVI   1(R4),X'2E'                NEW CODE FOR GAMMA IS SET        00584001
000634 D207 4002 3001 00002 00001   636            MVC   2(8,R4),1(R3)              OPT, EXTERNAL NAME TO O-BUFF     00585001
00063A 4130 3009            00009   637            LA    R3,9(,R3)                  INCR ZIN BY 9                    00586001
00063E 4140 4009            00009   638            LA    R4,9(,R4)                                                   00587001
000642 47F0 A24A            0024A   639            B     GENTEST                    BRANCH TO GENETEST               00588001
                                    640 *                                                                            00589001
000646 45F0 B1AC            011AC   641 LGAMMA1    BAL   R15,OUCHA                                                   00590001
00064A 47F0 A630            00630   642            B     LGAMMA2                    BRANCH TO LGAMMA2                00591001
                                    643 *                                                                            00592001
                                    644 *          END OF INPUT BUFFER                                               00593001
                                    645 *                                                                            00594001
00064E 45F0 B2EE            012EE   646 ZETA       BAL   R15,ICHA                   BRANCH TO SUBROUTINE ICHA        00595001
000652 47F0 A24A            0024A   647            B     GENTEST                    BRANCH TO GENTEST                00596001
                                    648 *                                                                            00597001
                                    649 *          OPENING BRACKET                                                   00598001
                                    650 *                                                                            00599001
000656 9180 C0AE      020AE         651 OPBRACK    TM    STATUS,SARRAY              HANDLING ARRAY DECLARATION ?     00600001
00065A 4710 A6EC            006EC   652            BO    LOPBRA5                    YES                              00601001
00065E 9180 D080      00080         653            TM    COMPFLGS,COMPMODE          SYNTAX CHECK MODE ?              00602001
000662 4710 A430            00430   654            BO    OTHOP                      YES                              00603001
000666 5870 BFF8            01FF8   655            L     R7,ZITAN                   ZITEAN IS LOADED INTO R7         00604001
00066A 9108 7007      00007         656            TM    7(R7),X'08'                AN ARRAY IDENTIFIER ?            00605001
00066E 4710 A430            00430   657            BO    LDO3                       NO                               00606001
000672 9104 7007      00007         658            TM    7(R7),X'04'                                                 00607001
000676 4780 A430            00430   659            BZ    LDO3                                                        00608001
00067A D503 C0C0 C0C4 020C0 020C4   660            CLC   PFA(4),PFANO               PFA = PFANO ?                    00609001
000680 4780 A430            00430   661            BE    LDO3                       YES, BRANCH                      00610001
000684 95FF C0B2      020B2         662            CLI   ZLVOV,X'FF'                TABLE OVERFLOW ?                 00611001
000688 4780 A430            00430   663            BE    LDO3                       YES                              00612001
00068C D503 C020 C01C 02020 0201C   664            CLC   ZARSPO(4),ZARNO            COMPARE ZARSPO WITH ZARNO        00613001
000692 4780 A6E4            006E4   665            BE    LOPBRA4                    NO SUBSCRIPT NESTING             00614001
000696 45F0 AD9E            00D9E   666            BAL   R15,SUCRIDEL                                                00615001
00069A 5880 C020            02020   667            L     R8,ZARSPO                  ZARSPO IS SET INTO R8            00616001
00069E 5980 C018            02018   668            C     R8,ZARMAX                  ZARSPO EQUAL TO ZARMAX ?         00617001
0006A2 4780 A6E4            006E4   669            BE    LOPBRA4                    YES, BRANCH                      00618001
0006A6 D200 800A C025 0000A 02025   670            MVC   10(1,R8),ZPOSIX+1          NUMBER OF COMMAS TO ARIDSTACK    00619001
0006AC 4180 8007            00007   671            LA    R8,7(,R8)                  ADDR NEXT ENTRY                  00620001
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  Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0006B0 5080 C020            02020   672 LOPBRA3  ST    R8,ZARSPO             ZARSPO IS SET TO ZARSTACK       00621001
0006B4 D202 8000 7008 00000 00008   673          MVC   0(3,R8),8(R7)         ARRAY IDENTIFIER IS STORED      00622001
0006BA 4100 4001            00001   674          LA    R0,1(,R4)                                             00623001
0006BE 5000 C068            02068   675          ST    R0,ZBRACK             ZBRACK IS SET TO ZOUT+1         00624001
0006C2 5B00 BFD0            01FD0   676          S     R0,ZOBWORK                                            00625001
0006C6 5000 C180            02180   677          ST    R0,ALIGN              RELATIVE BUFFER ADDR            00626001
0006CA D201 8005 C182 00005 02182   678          MVC   5(2,R8),ALIGNH                                        00627001
0006D0 D200 8004 BFF1 00004 01FF1   679          MVC   4(1,R8),ZOUTCOT+1     RECORD COUNTER TO ARIDSTAB      00628001
0006D6 D201 C024 BF54 02024 01F54   680          MVC   ZPOSIX(2),ZERO        ZPOSIX IS SET TO 0              00629001
0006DC 9200 C0B0      020B0         681          MVI   ZCLOBRA,X'00'         ZCLOBRA IS SET TO X'00'         00630001
0006E0 47F0 A438            00438   682          B     LDO2                  PUT OUT OPERATOR                00631001
                                    683 *                                                                    00632001
0006E4 4180 C026            02026   684 LOPBRA4  LA    R8,ZARSTACK           START ADDR OF ARIDSTAB          00633001
0006E8 47F0 A6B0            006B0   685          B     LOPBRA3               BRANCH TO LOPBRA3               00634001
                                    686 *                                                                    00635001
0006EC 4850 C0AC            020AC   687 LOPBRA5  LH    R5,BRCNT              INCREASE BRACKET COUNTER        00636001
0006F0 4150 5001            00001   688          LA    R5,1(0,R5)                                            00637001
0006F4 4050 C0AC            020AC   689          STH   R5,BRCNT                                              00638001
0006F8 47F0 A430            00430   690          B     OTHOP                 OUTPUT OPERATOR                 00639001
                                    691 *                                                                    00640001
                                    692 *        COMMA                                                       00641001
                                    693 *                                                                    00642001
0006FC 9180 D080      00080         694 COMMA    TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?             00643001
000700 4710 A430            00430   695          BO    OTHOP                 YES                             00644001
000704 D503 C020 C01C 02020 0201C   696          CLC   ZARSPO(4),ZARNO       ZARSPO = ZARNO ?                00645001
00070A 4780 A430            00430   697          BE    LDO3                  YES, BRANCH                     00646001
00070E D501 C024 BF6A 02024 01F6A   698          CLC   ZPOSIX(2),KH15        ZPOSIX = 15 ?                   00647001
000714 4780 A74A            0074A   699          BE    LCOMMA1               YES, BRANCH                     00648001
000718 9500 C0B0      020B0         700          CLI   ZCLOBRA,0             ZCLOBRA = X'FF' ?               00649001
00071C 4770 A752            00752   701          BNE   LCOMMA2               NO, BRANCH                      00650001
000720 5870 C068            02068   702          L     R7,ZBRACK             ZBRACK IS SET INTO R7           00651001
000724 4170 7012            00012   703          LA    R7,18(,R7)                                            00652001
000728 1947                         704          CR    R4,R7                 COMPARE ZOUT AND ZBRACK+18      00653001
00072A 4720 A756            00756   705          BH    LCOMMA3                                               00654001
00072E 4590 AEBE            00EBE   706          BAL   R9,SUSCRITE           OPTIMIZATION POSSIBLE ?         00655001
000732 4870 C024            02024   707 LCOMMA4  LH    R7,ZPOSIX             ZPOSIX IS SET INTO R7           00656001
000736 4170 7001            00001   708          LA    R7,1(,R7)             INCR ZPOSIX BY 1                00657001
00073A 4070 C024            02024   709          STH   R7,ZPOSIX                                             00658001
00073E 4170 4001            00001   710          LA    R7,1(,R4)                                             00659001
000742 5070 C068            02068   711          ST    R7,ZBRACK             ZBRACK IS SET TO ZOUT+1         00660001
000746 47F0 A438            00438   712          B     LDO2                  PUT OUT OPERATOR                00661001
                                    713 *                                                                    00662001
00074A 9680 D080      00080         714 LCOMMA1  OI    COMPFLGS,COMPMODE     SET SYNTAX CHECK MODE           00663001
00074E 47F0 A430            00430   715          B     LDO3                  BRANCH TO LDO3                  00664001
                                    716 *                                                                    00665001
000752 9200 C0B0      020B0         717 LCOMMA2  MVI   ZCLOBRA,0             ZERO ZCLOBRA                    00666001
000756 45F0 AD9E            00D9E   718 LCOMMA3  BAL   R15,SUCRIDEL                                          00667001
00075A 47F0 A732            00732   719          B     LCOMMA4               BRANCH TO LCOMMA4               00668001
                                    720 *                                                                    00669001
                                    721 *        CLOSING BRACKET                                             00670001
                                    722 *                                                                    00671001
00075E 9180 C0AE      020AE         723 CLOBRACK TM    STATUS,SARRAY         HANDLING ARRAY DECLARATION ?    00672001
000762 4710 A7C4            007C4   724          BO    CLOBRA3                                               00673001
000766 9180 D080      00080         725          TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?             00674001
00076A 4710 A430            00430   726          BO    OTHOP                 YES                             00675001
00076E D503 C020 C01C 02020 0201C   727          CLC   ZARSPO(4),ZARNO       THERE AN ARIDSTAB ENTRY ?       00676001
000774 4780 A430            00430   728          BE    LDO3                  NO                              00677001
000778 9500 C0B0      020B0         729          CLI   ZCLOBRA,0             PRECEEDING SUBSCR OPER CLOBRA ? 00678001
00077C 4770 A7BC            007BC   730          BNE   CLOBRA1               YES                             00679001
000780 5870 C068            02068   731          L     R7,ZBRACK             SUBSCRIPT MORE THAN 18 BYTES ?  00680001
000784 4170 7012            00012   732          LA    R7,18(,R7)                                            00681001
000788 1947                         733          CR    R4,R7                                                 00682001
00078A 4720 A7BC            007BC   734          BH    CLOBRA1               YES, NO OPTIMIZATION            00683001
00078E 4590 AEBE            00EBE   735          BAL   R9,SUSCRITE           TEST IF OPTIMIZABLE             00684001
000792 5870 C020            02020   736 CLOBRA2  L     R7,ZARSPO             UPDATE CURRENT ARIDSTAB PTR     00685001
000796 4B70 BF5E            01F5E   737          SH    R7,KH7                                                00686001
00079A 5070 C020            02020   738          ST    R7,ZARSPO                                             00687001
00079E 5970 C01C            0201C   739          C     R7,ZARNO              ARIDSTAB EMPTY                  00688001
0007A2 4780 A430            00430   740          BE    LDO3                  YES                             00689001
0007A6 D200 C025 700A 02025 0000A   741          MVC   ZPOSIX+1(1),10(R7)    RESET SUBSC POSITION CNTR       00690001
0007AC 4170 4001            00001   742          LA    R7,1(,R4)             SET ZBRACK                      00691001
0007B0 5070 C068            02068   743          ST    R7,ZBRACK                                             00692001
0007B4 92FF C0B0      020B0         744          MVI   ZCLOBRA,X'FF'         LAST SUBSCR OPER CLOBRACK       00693001
0007B8 47F0 A430            00430   745          B     LDO3                                                  00694001
                                    746 *                                                                    00695001
0007BC 45F0 AD9E            00D9E   747 CLOBRA1  BAL   R15,SUCRIDEL          NO OPTIMIZATION POSSIBLE        00696001
0007C0 47F0 A792            00792   748          B     CLOBRA2                                               00697001
                                    749 *                                                                    00698001
0007C4 4850 C0AC            020AC   750 CLOBRA3  LH    R5,BRCNT              DECREASE BRACKET COUNTER        00699001
0007C8 0650                         751          BCTR  R5,0                                                  00700001
0007CA 4050 C0AC            020AC   752          STH   R5,BRCNT                                              00701001
0007CE 47F0 A430            00430   753          B     OTHOP                 OUTPUT OPERATOR                 00702001
                                    754 *                                                                    00703001
                                    755 *        LETTER                                                      00704001
                                    756 *                                                                    00705001
                                    757 *        SCAN FOR END OF IDENTIFIER                                  00706001
                                    758 *        BRANCH TO IDENT TO SEARCH FOR THE IDENTIFIER IN ITAB        00707001
                                    759 *        REPLACE IDENTIFIER BY INTERNAL NAME                         00708001
                                    760 *                                                                    00709001
                                    761 *        INITIALIZED REG = IDENTIFIER START ADDR                     00710001
                                    762 *        SUBROUTINE LINK IDENTX                                      00711001
                                    763 *                                                                    00712001
0007D2 45F0 B34E            0134E   764 LETTER5  BAL   R15,ITABMOP           READ ITAB RECORD                00713001
0007D6 47F0 A7DE            007DE   765          B     LETTERP                                               00714001
                                    766 *                                                                    00715001
0007DA 4700 A7D2            007D2   767 LETTER   NOP   LETTER5               BRANCH TO READ ITAB RECORD      00716001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

0007DE 4180 C081             02081    768 LETTERP  LA    R8,ZIDEX                                                 00717001
0007E2 4100 C087             02087    769          LA    R0,ZIDEX+6                                               00718001
0007E6 1893                           770 LETTER4  LR    R9,R3                                                    00719001
0007E8 1B22                           771          SR    R2,R2                                                    00720001
0007EA 1B11                           772          SR    R1,R1                                                    00721001
0007EC DDFF 3000 C2D6 00000 022D6     773 LETTER6  TRT   0(256,R3),IDENTI                                         00722001
0007F2 4780 A82E             0082E    774          BZ    LETTER0                 STILL SAME IDENTIFIER            00723001
0007F6 1831                           775          LR    R3,R1                   UPDATE R3                        00724001
0007F8 47F2 A7F8             007F8    776          B     *(R2)                                                    00725001
0007FC 47F0 A836             00836    777          B     ZETALET                 +04                              00726001
000800 47F0 A842             00842    778          B     RHO                     +08                              00727001
000804 47F0 A852             00852    779          B     ERROR1                  +12                              00728001
                                      780 *                                      END OF IDENTIFIER IS FOUND       00729001
000808 47F0 A860             00860    781          B     IDENT                   ITAB SEARCH                      00730001
                                      782 *                                                                       00731001
00080C 5070 BFF8             01FF8    783 LETTER1  ST    R7,ZITAN                SAVE POINTER TO LAST IDENTIFIER  00732001
000810 5940 BFE4             01FE4    784          C     R4,ZFILE5               SPACE IN OUTPUT BUFFER           00733001
000814 4720 A826             00826    785          BH    LETTER2                 NO SPACE                         00734001
000818 D204 4001 7006 00001 00006     786 LETTER3  MVC   1(5,R4),6(R7)           MOVE INTERNAL NAME TO OUTPUT BUF 00735001
00081E 4140 4005             00005    787          LA    R4,5(,R4)                                                00736001
000822 47F0 A24A             0024A    788          B     GENTEST                                                  00737001
                                      789 *                                                                       00738001
000826 45F0 B1AC             011AC    790 LETTER2  BAL   R15,OUCHA                                                00739001
00082A 47F0 A818             00818    791          B     LETTER3                                                  00740001
                                      792 *                                                                       00741001
00082E 4130 3100             00100    793 LETTER0  LA    R3,256(,R3)             UPDATE INPUT PTR                 00742001
000832 47F0 A7EC             007EC    794          B     LETTER6                                                  00743001
                                      795 *                                                                       00744001
                                      796 *        END OF INPUT BUFFER IN THE MIDDLE OF AN IDENTIFIER             00745001
                                      797 *                                                                       00746001
000836 45F0 B5B0             015B0    798 ZETALET  BAL   R15,MOVE                                                 00747001
00083A 45F0 B2EE             012EE    799          BAL   R15,ICHA                                                 00748001
00083E 47F0 A7E6             007E6    800          B     LETTER4                                                  00749001
                                      801 *                                                                       00750001
                                      802 *        LETTER STRING USED AS PARAMETER DELIMITER                      00751001
                                      803 *        REPLACE STRING BY COMMA                                        00752001
                                      804 *                                                                       00753001
000842 9526 4000       00000          805 RHO      CLI   0(R4),XFRBRAC           RIGHT BRACKET ?                  00754001
000846 4770 A246             00246    806          BNE   GENTEST1                NO                               00755001
00084A 9225 4000       00000          807          MVI   0(R4),XFCOMMA           REPLACE RIGHT BRACKET BY COMMA   00756001
00084E 47F0 A246             00246    808          B     GENTEST1                                                 00757001
                                      809 *                                                                       00758001
                                      810 *        INVALID CHARACTER IN IDENTIFIER                                00759001
                                      811 *                                                                       00760001
000852 45F0 B5B0             015B0    812 ERROR1   BAL   R15,MOVE                                                 00761001
000856 D201 C014 BF78 02014 01F78     813          MVC   ZERRONU,INVOP                                            00762001
00085C 47F0 B4CE             014CE    814          B     INCOROP                                                  00763001
                                      815 *                                                                       00764001
                                      816 *        IDENT                                                          00765001
                                      817 *                                                                       00766001
                                      818 *        A SEARCH THRU ITAB FOR THE IDENTIFIER WITH THE START           00767001
                                      819 *        ADDRESS IN ZIDSTAR IS DONE. IF FOUND BRANCH TO ROUTINE         00768001
                                      820 *        FOL1 FOR TYPECHECK, IF NOT REPLACE IDENTIFIER WITH ALL         00769001
                                      821 *        PURPOSE IDENTIFIER                                             00770001
                                      822 *                                                                       00771001
                                      823 *        RECEIVED REG = ADDR OF IDENTIFIER START                        00772001
                                      824 *        INITIALIZED R7                                                 00773001
                                      825 *                                                                       00774001
000860 45F0 B5B0             015B0    826 IDENT    BAL   R15,MOVE                MOVE IDENTIFIER                  00775001
000864 D204 8000 BF54 00000 01F54     827          MVC   0(5,R8),ZERO            FILL UP WITH ZERO                00776001
                                      828 *                                      START ITAB SEARCH                00777001
00086A 5870 BFFC             01FFC    829          L     R7,ZCURITEN             ADDR OF LAST ITAB ENTRY          00778001
00086E 5810 BFF4             01FF4    830          L     R1,ZIBSTAO              ITAB START ADDR                  00779001
000872 4100 000B             0000B    831          LA    R0,11                                                    00780001
000876 1300                           832          LCR   R0,R0                   MINUS ELEVEN                     00781001
000878 4150 A8A8             008A8    833 IDENT2   LA    R5,IDENT4                                                00782001
00087C D505 7000 C081 00000 02081     834 IDENT3   CLC   0(6,R7),ZIDEX           IDENTIFIER SEARCH                00783001
000882 0785                           835          BER   R5                      FOUND                            00784001
000884 8670 A87C             0087C    836 IDENT6   BXH   R7,R0,IDENT3            PROCEED SEARCH, IF NOT           00785001
000888 D203 C00C C0A8 0200C 020A8     837          MVC   ZBEGERR,OPSTART                                          00786001
00088E 5080 C010             02010    838          ST    R8,ZENDERR                                               00787001
000892 D201 C014 BF7A 02014 01F7A     839          MVC   ZERRONU,UNDEFOP                                          00788001
000898 45F0 B52C             0152C    840          BAL   R15,MOVERRO                                              00789001
00089C 9680 D080       00080          841          OI    COMPFLGS,COMPMODE       SET SYNTAX CHECK MODE            00790001
0008A0 4170 C076             02076    842          LA    R7,ZALLPU               ALL PURPOSE IDENTIFIER           00791001
0008A4 47F0 A80C             0080C    843          B     LETTER1                                                  00792001
                                      844 *                                                                       00793001
0008A8 47F0 A8BE             008BE    845 IDENT4   B     IDENT5                  BRANCH IF NOT PROC HEAD          00794001
                                      846 *                                                                       00795001
0008AC 9102 7006       00006          847          TM    6(R7),X'02'             PROC OR FORMAL PARAMETER ?       00796001
0008B0 4780 A884             00884    848          BZ    IDENT6                  NO, CONTINUE SEARCH              00797001
0008B4 D500 7008 C0AF 00008 020AF     849          CLC   8(1,R7),CURPBN          DECLARED IN LAST BLOCK ?         00798001
0008BA 4770 A884             00884    850          BNE   IDENT6                  NO, CONTINUE SEARCH              00799001
0008BE 9180 C0AE       020AE          851 IDENT5   TM    STATUS,SARRAY           HANDLING ARRAY DECLARATION ?     00800001
0008C2 4780 A912             00912    852          BZ    FOLI                    NO                               00801001
0008C6 D501 C0AC BF54 020AC 01F54     853          CLC   BRCNT(2),ZERO           IDENTIFIER IN ARRAY LIST ?       00802001
0008CC 4780 A912             00912    854          BE    FOLI                    NO, ARRAY IDENTIFIER             00803001
0008D0 D500 7008 C0AF 00008 020AF     855          CLC   8(1,R7),CURPBN          DECLARED IN LAST BLOCK ?         00804001
0008D6 4740 A912             00912    856          BL    FOLI                    NO                               00805001
0008DA D201 C06C 7006 0206C 00006     857          MVC   ZSTO(2),6(R7)           IDENT CHARACTERISTIC             00806001
0008E0 D401 C06C C070 0206C 02070     858          NC    ZSTO(2),ZSTO1                                            00807001
0008E6 D501 C06C C072 0206C 02072     859          CLC   ZSTO(2),ZSTO2           FUNCTION PROCEDURE ?             00808001
0008EC 4780 A8F8             008F8    860          BE    IDENT7                  YES                              00809001
0008F0 9502 C06C       0206C          861          CLI   ZSTO,X'02'              FORMAL PARAM OR PROC ?           00810001
0008F4 4780 A912             00912    862          BE    FOLI                    YES                              00811001
0008F8 D203 C00C C0A8 0200C 020A8     863 IDENT7   MVC   ZBEGERR,OPSTART         GIVE WARNING MESSAGE             00812001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

0008FE 5080 C010            02010   864          ST    R8,ZENDERR                                          00813001
000902 D201 C014 BF88 02014 01F88   865          MVC   ZERRONU,ARRAYERR                                    00814001
000908 45F0 B52C            0152C   866          BAL   R15,MOVERRO                                         00815001
00090C 1A70                         867          AR    R7,R0                 PROCEED SEARCH FOR IDENTIFIER  00816001
00090E 47F0 A878            00878   868          B     IDENT2                                              00817001
                                    869 *                                                                  00818001
                                    870 *        FOLI                                                      00819001
                                    871 *                                                                  00820001
                                    872 *        CHECK TYPE OF IDENTIFIER                                  00821001
                                    873 *                                                                  00822001
000912 4350 7006            00006   874 FOLI     IC    R5,6(,R7)             ISOLATE SPECIAL USE BITS       00823001
000916 5450 C17C            0217C   875          N     R5,SPECUSE            X'00000006'                    00824001
00091A 1A55                         876          AR    R5,R5                 SPECIAL USE BITS MULTIPLIED BY 4 00825001
00091C 47F5 A920            00920   877          B     *+4(R5)                                             00826001
000920 47F0 A930            00930   878          B     NOCRI              +00 NON-CRITICAL IDENTIFIER       00827001
000924 47F0 A96A            0096A   879          B     PROFU              +04 PROCEDURE OR FORMAL PARAMETER 00828001
000928 47F0 A99E            0099E   880          B     SWILA              +08 LABEL OR SWITCH               00829001
00092C 47F0 AA1C            00A1C   881          B     CRITI              +12 CRITICAL IDENTIFIER           00830001
                                    882 *                                                                  00831001
000930 9180 D080      00080         883 NOCRI    TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?            00832001
000934 4710 A80C            0080C   884          BO    LETTER1                                             00833001
000938 9500 C0B1      020B1         885          CLI   ZFORTEST,X'00'        APPEARS IDENT BETWEEN FOR - DO 00834001
00093C 4770 A962            00962   886          BNE   NOCRI1                YES                            00835001
                                    887 *                                    SHOULD ENTRY TO LVTAB BE DONE ? 00836001
000940 D503 C0C0 C0C4 020C0 020C4   888          CLC   PFA(4),PFANO          FOR-STATMENT                   00837001
000946 4780 A80C            0080C   889          BE    LETTER1               NO, NO LVTAB-ENTRY             00838001
00094A 9516 3000      00000         890          CLI   0(R3),X'16'           IDENTIFIER FOLLOWED BY ASSIGN ? 00839001
00094E 4770 A80C            0080C   891          BNZ   LETTER1               NO, NO LVTEB-ENTRY             00840001
000952 9102 7007      00007         892          TM    7(R7),X'02'           INTEGER ?                      00841001
000956 4710 A80C            0080C   893          BO    LETTER1               NO, NO LVTAB-ENTRY             00842001
00095A 4590 AE18            00E18   894          BAL   R9,LETRAF             MAKE ENTRY IN LVTAB            00843001
00095E 47F0 A80C            0080C   895          B     LETTER1               RETURN                         00844001
                                    896 *                                                                  00845001
000962 45E0 AB7C            00B7C   897 NOCRI1   BAL   R14,CRIMA             MAKE CRIDTAB ENTRY             00846001
000966 47F0 A80C            0080C   898          B     LETTER1                                             00847001
                                    899 *                                                                  00848001
                                    900 *        PROFU                                                     00849001
                                    901 *                                                                  00850001
                                    902 *        BECAUSE OF POSSIBLE SIDE EFFECTS OF A PROCEDURE,          00851001
                                    903 *        OPTIMIZATION OF SUBSCRIPTS AND FOR-STATEMENTS IS          00852001
                                    904 *        INHIBITED                                                 00853001
                                    905 *                                                                  00854001
                                    906 *        SUBROUTINE LINK VIA R15                                   00855001
                                    907 *                                                                  00856001
00096A 9180 D080      00080         908 PROFU    TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?            00857001
00096E 4710 A80C            0080C   909          BO    LETTER1               YES                            00858001
000972 D203 C020 C01C 02020 0201C   910          MVC   ZARSPO(4),ZARNO       SKIP ARIDSTAB                  00859001
000978 95C0 C0B1      020B1         911          CLI   ZFORTEST,X'C0'        CONTROLLED VARIABLE ?          00860001
00097C 4770 A988            00988   912          BNE   PROFU1                NO                             00861001
000980 5850 C0CC            020CC   913          L     R5,ZFSPTR             YES, CLASSIFIED NORMAL         00862001
000984 96F0 5000      00000         914          OI    0(R5),NORMAL                                        00863001
000988 9200 C0B1      020B1         915 PROFU1   MVI   ZFORTEST,X'00'        TURN OFF FOR-SWITCH            00864001
00098C D503 C0C0 C0C4 020C0 020C4   916          CLC   PFA(4),PFANO          CRIDTAB EMPTY ?                00865001
000992 4780 A80C            0080C   917          BE    LETTER1               YES, RETURN                    00866001
000996 45F0 AD00            00D00   918          BAL   R15,DELCRIV           DELETE ALL CRIDTAB-ENTRIES     00867001
00099A 47F0 A80C            0080C   919          B     LETTER1               RETURN                         00868001
                                    920 *                                                                  00869001
                                    921 *        SWILA                                                     00870001
                                    922 *                                                                  00871001
                                    923 *        IN CASE OF SWITCH OF LABEL DECLARATION NO ACTION IS       00872001
                                    924 *        TAKEN. IF USED IN A GO-TO-STATEMENT A TEST IS DONE IF     00873001
                                    925 *        THE ALGOL RULES ARE FOLLOWED. IF NOT GIVE MESSAGE         00874001
                                    926 *                                                                  00875001
                                    927 *        RECEIVED R7                                               00876001
                                    928 *        WORK REG R1, SIGNEMBR, R1, R9                             00877001
                                    929 *                                                                  00878001
00099E 1817                         930 SWILA    LR    R1,R7                 START SEARCH FOR HEADING ENTRY 00879001
0009A0 4B10 BF66            01F66   931 SWILA1   SH    R1,KH11                                             00880001
0009A4 952B 1005      00005         932          CLI   5(R1),X'2B'           HEADING TEST                   00881001
0009A8 4770 A9A0            009A0   933          BNE   SWILA1                NO HEADING                     00882001
0009AC D201 C182 1008 02182 00008   934          MVC   ALIGNH(2),8(R1)                                     00883001
0009B2 5890 C180            02180   935          L     R9,ALIGN                                            00884001
0009B6 4820 C074            02074   936          LH    R2,ZIGN               ACTUAL IGN                     00885001
0009BA 4110 D477            00477   937          LA    R1,ZFOSTA-1           ADDR OF BYTE PRECEED FSTAB     00886001
0009BE 1929                         938 SWILA2   CR    R2,R9                 COMPARE DECLAR AD AND CUR IGN  00887001
0009C0 4720 A9F2            009F2   939          BH    SWILA3                CHECK EMBRACING IGN TO CUR IGN 00888001
0009C4 4780 A80C            0080C   940          BE    LETTER1                                             00889001
0009C8 9140 C0AE      020AE         941          TM    STATUS,SSWITCH        IN SWITCH DECLARATION ?        00890001
0009CC 4780 A9E8            009E8   942          BZ    SWILA21               NO, SERIOUS ERROR              00891001
0009D0 D203 C00C C0A8 0200C 020A8   943          MVC   ZBEGERR,OPSTART       YES, GIVE WARNING MESSAGE      00892001
0009D6 5080 C010            02010   944          ST    R8,ZENDERR                                          00893001
0009DA D201 C014 BF8A 02014 01F8A   945          MVC   ZERRONU,SWITCHER                                    00894001
0009E0 45F0 B52C            0152C   946          BAL   R15,MOVERRO                                         00895001
0009E4 47F0 A80C            0080C   947          B     LETTER1                                             00896001
                                    948 *                                                                  00897001
0009E8 D201 C014 BF82 02014 01F82   949 SWILA21  MVC   ZERRONU,GOTOFOR                                     00898001
0009EE 47F0 B4CE            014CE   950          B     INCOROP                                             00899001
                                    951 *                                                                  00900001
0009F2 1852                         952 SWILA3   LR    R5,R2                 COMPUTE ADDR OF IGN-TAB-ENTR   00901001
0009F4 1A52                         953          AR    R5,R2                                               00902001
0009F6 1A52                         954          AR    R5,R2                 3+ZIGNEMB                      00903001
0009F8 4155 D6CD            006CD   955          LA    R5,GPTAB(R5)          GPTAB+3*ZIGNEMB                00904001
0009FC 9500 5002      00002         956          CLI   2(R5),0               TEST IF FORGROUP               00905001
000A00 4780 AA0E            00A0E   957          BE    SWILA4                NO                             00906001
000A04 D200 AA0D 5002 00A0D 00002   958          MVC   *+9(1),2(R5)          ADDR ACTUAL ENTRY IN FSTAB     00907001
000A0A 9620 1000      00000         959          OI    0(R1),X'20'           SET BIT IND BRANCH OUT OF FS   00908001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000A0E D201 C182 5000 02182 00000   960 SWILA4   MVC   ALIGNH(2),0(R5)                                      00909001
000A14 5820 C180            02180   961          L     R2,ALIGN                 LOAD EMBRACING IGN          00910001
000A18 47F0 A9BE            009BE   962          B     SWILA2                                               00911001
                                    963 *                                                                   00912001
                                    964 *        CRITI                                                      00913001
                                    965 *                                                                   00914001
                                    966 *        ROUTINE ENTRED WHEN A CRITICAL IDENTIFIER IS FOUND IN      00915001
                                    967 *        ITAB. IF THE IDENTIFIER APPEARS BETWEEN FOR AND DO A NEW   00916001
                                    968 *        CHAINED CRIDTAB-ENTRY IS MADE. OTHERWISE ONLY THE          00917001
                                    969 *        FSTAB-ENTRY IS TREATED                                     00918001
                                    970 *                                                                   00919001
                                    971 *        WORK REG R1,R8                                             00920001
                                    972 *                                                                   00921001
000A1C 9500 C0B1      020B1         973 CRITI    CLI   ZFORTEST,X'00'           CRITICAL IDENTIFIER IN FOR-LIST? 00922001
000A20 4770 AA9E            00A9E   974          BNE   CRITIF                   YES                         00923001
                                    975 *                                       IDENTIFIER NOT FOR-LIST-ELEMENT  00924001
000A24 D503 C020 C01C 02020 0201C   976          CLC   ZARSPO(4),ZARNO          CURRENTLY HANDLING SUBSCR EXPR?  00925001
000A2A 4770 A80C            0080C   977          BC    7,LETTER1                YES                         00926001
000A2E 5810 C0C0            020C0   978          L     R1,PFA                   POINTER TO LAST CRIDTAB ENTRY  00927001
000A32 D502 1001 7008 00001 00008   979 CRITI1   CLC   1(3,R1),8(R7)            SCAN CRIDTAB FOR LAST ENTRY 00928001
000A38 4780 AA44            00A44   980          BE    CRITI2                   FOUND                       00929001
000A3C 4B10 BF62            01F62   981          SH    R1,KH9                                               00930001
000A40 47F0 AA32            00A32   982          B     CRITI1                                               00931001
                                    983 *                                                                   00932001
000A44 9516 3000      00000         984 CRITI2   CLI   0(R3),X'16'              IDENTIFIER FOLLOWED BY ASSIGN ?  00933001
000A48 4780 AA66            00A66   985          BE    CRITI3                   YES                         00934001
000A4C 9180 1004      00004         986          TM    4(R1),X'80'              CONTROLLED VARIABLE ?       00935001
000A50 4780 A80C            0080C   987          BZ    LETTER1                  NO, RETURN                  00936001
000A54 1B55                         988          SR    R5,R5                    ADDR FSTAB ENTRY            00937001
000A56 4350 1000            00000   989          IC    R5,0(,R1)                                            00938001
000A5A 4155 D478            00478   990          LA    R5,ZFOSTA(R5)                                        00939001
000A5E 9680 5000      00000         991          OI    0(R5),X'80'              ELEMENTARY LOOP             00940001
000A62 47F0 A80C            0080C   992          B     LETTER1                  RETURN                      00941001
                                    993 *                                                                   00942001
                                    994 *        IDENTIFIER FOLLOWED BY ASSIGNMENT                          00943001
                                    995 *                                                                   00944001
000A66 1B55                         996 CRITI3   SR    R5,R5                    GET ADDR OF FSTAB ENTRY     00945001
000A68 4350 1000            00000   997          IC    R5,0(,R1)                                            00946001
000A6C 4155 D478            00478   998          LA    R5,ZFOSTA(R5)                                        00947001
000A70 9180 1004      00004         999          TM    4(R1),X'80'              CONTROLLED VARIABLE ?       00948001
000A74 4710 AA96            00A96  1000          BO    CRITI4                   YES                         00949001
000A78 96F0 5000      00000        1001          OI    0(R5),NORMAL             NORMAL LOOP                 00950001
000A7C 9140 1004      00004        1002          TM    4(R1),X'40'              MORE CHAINED ENTRIES ?      00951001
000A80 4780 A80C            0080C  1003          BZ    LETTER1                  NO, RETURN                  00952001
000A84 D201 C182 1005 02182 00005  1004          MVC   ALIGNH(2),5(R1)          GET ADDR OF NEXT ENTRY      00953001
000A8A 5810 C180            02180  1005          L     R1,ALIGN                                             00954001
000A8E 5A10 C0D0            020D0  1006          A     R1,ZFOCRI                                            00955001
000A92 47F0 AA66            00A66  1007          B     CRITI3                   HANDLE NEXT ENTRY           00956001
                                   1008 *                                                                   00957001
000A96 9640 5000      00000        1009 CRITI4   OI    0(R5),X'40'              INDICATE ASSIGN TO CTR VAR  00958001
000A9A 47F0 A80C            0080C  1010          B     LETTER1                                              00959001
                                   1011 *                                                                   00960001
                                   1012 *        TREATMENT OF CRIT ID IN FOR-LIST                           00961001
                                   1013 *                                                                   00962001
000A9E 45E0 AB7C            00B7C  1014 CRITIF   BAL   R14,CRIMA                MAKE CRIDTAB ENTRY          00963001
000AA2 5880 C0C0            020C0  1015          L     R8,PFA                   PTR TO LAST CRIDTAB ENTRY   00964001
000AA6 1818                        1016          LR    R1,R8                    START SCAN FOR PREVIOUS ENTRY  00965001
000AA8 4B10 BF62            01F62  1017 CRITIF1  SH    R1,KH9                                               00966001
000AAC 5910 C0C4            020C4  1018          C     R1,PFANO                 THERE A PREVIOUS ENTRY ?    00967001
000AB0 47D0 A80C            0080C  1019          BNH   LETTER1                  NO, DELETED AT CRIDTAB OVERFLOW  00968001
000AB4 D502 1001 8001 00001 00001  1020          CLC   1(3,R1),1(R8)            PREVIOUS ENTRY ?            00969001
000ABA 4770 AAA8            00AA8  1021          BNE   CRITIF1                  NO                          00970001
                                   1022 *                                       PREVIOUS ENTRY IN CRIDTAB FOUND  00971001
000ABE 45F0 AB52            00B52  1023          BAL   R15,PUTCHAIN             CHAIN NEW ENTRY TO PREVIOUS 00972001
000AC2 9180 8004      00004        1024          TM    4(R8),X'80'              NEW ENTRY CONTROLLED VARIABLE  00973001
000AC6 4780 AB02            00B02  1025          BZ    CRITIN                   NO                          00974001
                                   1026 *                                                                   00975001
                                   1027 *        TREATMENT OF CONTROLLED VARIABLE                           00976001
                                   1028 *                                                                   00977001
000ACA 1B55                        1029 CRITIC   SR    R5,R5                                                00978001
000ACC 4350 1000            00000  1030          IC    R5,0(,R1)                FSN OF CHAINED CRIDTAB ENTRY  00979001
000AD0 4155 D478            00478  1031          LA    R5,ZFOSTA(R5)            ADDR OF CHAINED FSTAB ENTRY 00980001
000AD4 9180 1004      00004        1032          TM    4(R1),X'80'              CHAINED ENTRY CONTROLLED ?  00981001
000AD8 4710 AAFA            00AFA  1033          BO    CRITIC1                  YES                         00982001
000ADC 96F0 5000      00000        1034          OI    0(R5),NORMAL             INDICATE NORMAL LOOP        00983001
000AE0 9140 1004      00004        1035          TM    4(R1),X'40'              MORE CHAINED ENTRIES ?      00984001
000AE4 4780 A80C            0080C  1036          BZ    LETTER1                  NO, RETURN                  00985001
000AE8 D201 C182 1005 02182 00005  1037          MVC   ALIGNH(2),5(R1)          GET ADDR OF NEXT CHAINED ENTRY  00986001
000AEE 5810 C180            02180  1038          L     R1,ALIGN                                             00987001
000AF2 5A10 C0D0            020D0  1039          A     R1,ZFOCRI                                            00988001
000AF6 47F0 AACA            00ACA  1040          B     CRITIC                                               00989001
                                   1041 *                                                                   00990001
000AFA 9640 5000      00000        1042 CRITIC1  OI    0(R5),X'40'              BIT FOR ASSIGN TO CONTROL VAR  00991001
000AFE 47F0 A80C            0080C  1043          B     LETTER1                                              00992001
                                   1044 *                                                                   00993001
                                   1045 *        TREATMENT OF NON-CONTROLLED VARIABLE                       00994001
                                   1046 *                                                                   00995001
000B02 9180 1004      00004        1047 CRITIN   TM    4(R1),X'80'              CHAINED ENTRY CONTROLLED ?  00996001
000B06 4710 AB24            00B24  1048          BO    CRITIN1                  YES                         00997001
000B0A 9140 1004      00004        1049          TM    4(R1),X'40'              MORE CHAINED ENTRIES ?      00998001
000B0E 4780 A80C            0080C  1050          BZ    LETTER1                  NO                          00999001
000B12 D201 C182 1005 02182 00005  1051          MVC   ALIGNH(2),5(R1)          GET ADDR OF CHAINED ENTRY   01000001
000B18 5810 C180            02180  1052          L     R1,ALIGN                                             01001001
000B1C 5A10 C0D0            020D0  1053          A     R1,ZFOCRI                                            01002001
000B20 47F0 AB02            00B02  1054          B     CRITIN                                               01003001
                                   1055 *                                                                   01004001
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  Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000B24 1B55                          1056 CRITIN1  SR    R5,R5                 GET ADDR OF CHAINED FSTAB ENTRY  01005001
000B26 4350 1000            00000    1057          IC    R5,0(,R1)                                              01006001
000B2A 4155 D478            00478    1058          LA    R5,ZFOSTA(R5)                                          01007001
000B2E D500 1000 C0B3 00000 020B3    1059          CLC   0(1,R1),ZFSN          CHAINED ENTRY PART OF ACTIVE FOR 01008001
000B34 4780 AB4A            00B4A    1060          BE    CRITIN2               YES                              01009001
000B38 D503 C020 C01C 02020 0201C    1061          CLC   ZARSPO(4),ZARNO       CURRENTLY HANDLING A SUBSCRIPT ? 01010001
000B3E 4770 A80C            0080C    1062          BNE   LETTER1               YES, RETURN                      01011001
000B42 9680 5000      00000          1063          OI    0(R5),X'80'           SET ELEMENTARY LOOP              01012001
000B46 47F0 A80C            0080C    1064          B     LETTER1                                                01013001
                                     1065 *                                                                     01014001
000B4A 96F0 5000      00000          1066 CRITIN2  OI    0(R5),NORMAL          INDICATE NORMAL LOOP             01015001
000B4E 47F0 A80C            0080C    1067          B     LETTER1                                                01016001
                                     1068 *                                                                     01017001
                                     1069 *        PUTCHAIN                                                     01018001
                                     1070 *                                                                     01019001
                                     1071 *        ROUTINE TO CHAIN NEW CRIDTAB ENTRY TO PREVIOUS               01020001
                                     1072 *                                                                     01021001
                                     1073 *        RETURN VIA R15                                               01022001
                                     1074 *        RECEIVED REG R8, R1                                          01023001
                                     1075 *                                                                     01024001
000B52 9640 8004      00004          1076 PUTCHAIN OI    4(R8),X'40'           BIT FOR PREVIOUS CRITICAL IDENT  01025001
000B56 9620 1004      00004          1077          OI    4(R1),X'20'           BIT FOR SUBSEQUENT CRIT IDENT    01026001
000B5A 5860 C0D0            020D0    1078          L     R6,ZFOCRI             CRIDTAB START ADDR               01027001
000B5E 1851                          1079          LR    R5,R1                 GET BACKWARD CHAIN               01028001
000B60 1B56                          1080          SR    R5,R6                                                  01029001
000B62 5050 C180            02180    1081          ST    R5,ALIGN                                               01030001
000B66 D201 8005 C182 00005 02182    1082          MVC   5(2,R8),ALIGNH                                         01031001
000B6C 1858                          1083          LR    R5,R8                 GET FORWARD CHAIN                01032001
000B6E 1B56                          1084          SR    R5,R6                                                  01033001
000B70 5050 C180            02180    1085          ST    R5,ALIGN                                               01034001
000B74 D201 1007 C182 00007 02182    1086          MVC   7(2,R1),ALIGNH                                         01035001
000B7A 07FF                          1087          BR    R15                   RETURN                           01036001
                                     1088 *                                                                     01037001
                                     1089 *        CRIMA                                                        01038001
                                     1090 *                                                                     01039001
                                     1091 *        SUBROUTINE TO MAKE A NEW CRIDTAB ENTRY                       01040001
                                     1092 *                                                                     01041001
                                     1093 *        IN CASE OF CRIDTAB OVERFLOW THE ROUTINE CRIFLOW IS           01042001
                                     1094 *        ENTRED TO DELETE FROM CRIDTAB ALL ENTRIES BELONG TO THE      01043001
                                     1095 *        MOST EMBRACING FOR-STATEMENT. CRIFODEL IS ENTERED IF AN      01044001
                                     1096 *        ARRAY ELEMENT IS HANDLED                                     01045001
                                     1097 *                                                                     01046001
                                     1098 *        RETURN VIA R14                                               01047001
                                     1099 *        RECEIVED REG R7 POINTER TO ACTUELL ITAB ENTRY                01048001
                                     1100 *        WORK REG R8                                                  01049001
                                     1101 *        SUBROUTINE CRIFLOW, LETRAF, CRIFODEL, SUCRIDEL               01050001
                                     1102 *                                                                     01051001
000B7C 9104 7007      00007          1103 CRIMA    TM    7(R7),X'04'           ARRAY ?                          01052001
000B80 4710 AC28            00C28    1104          BO    CRIMA1                YES, NO OPTIMIZATION POSSIBLE    01053001
000B84 5880 C0C0            020C0    1105          L     R8,PFA                CURRENT CRIDTAB PTR              01054001
000B88 91C0 C0B1      020B1          1106          TM    ZFORTEST,X'C0'        CONTROLLED VARIABLE ?            01055001
000B8C 4710 ABE8            00BE8    1107          BO    CRIMAC                YES                              01056001
                                     1108 *                                                                     01057001
                                     1109 *        TREATMENT OF 'NOT CONTROLLED' VARIABLE                       01058001
                                     1110 *                                                                     01059001
000B90 5980 C0C8            020C8    1111          C     R8,PFAMAX             CRIDTAB OVERFLOW ?               01060001
000B94 4780 ABD6            00BD6    1112          BE    CRIMAN1               YES                              01061001
000B98 4180 8009            00009    1113 CRIMAN2  LA    R8,9(,R8)             UPDATE CURRENT PTR               01062001
000B9C 9200 8004      00004          1114          MVI   4(R8),X'00'           FLAG BYTE SHOWS NO CNTL VARIABLE 01063001
000BA0 9102 7007      00007          1115          TM    7(R7),X'02'           INTEGER ?                        01064001
000BA4 4780 ABB0            00BB0    1116          BZ    CRIMA2                YES                              01065001
000BA8 5850 C0CC            020CC    1117          L     R5,ZFSPTR             ADDR FSTAB ENTRY                 01066001
000BAC 9680 5000      00000          1118          OI    0(R5),NOCOUNT         CLASSIFY AS NOT COUNTING LOOP    01067001
                                     1119 *                                                                     01068001
000BB0 D202 8001 7008 00001 00008    1120 CRIMA2   MVC   1(3,R8),8(R7)         MOVE ADDR PART TO CRIDTAB        01069001
000BB6 D200 8000 C0B3 00000 020B3    1121          MVC   0(1,R8),ZFSN          MOVE FSN TO CRIDTAB              01070001
000BBC 1857                          1122          LR    R5,R7                 GET RELATIVE ADDR IN ITAB        01071001
000BBE 5B50 BFF4            01FF4    1123          S     R5,ZIBSTAO                                             01072001
000BC2 5050 C180            02180    1124          ST    R5,ALIGN              ITAB RELATIVE ADDR               01073001
000BC6 D201 8005 C182 00005 02182    1125          MVC   5(2,R8),ALIGNH                                         01074001
000BCC 9606 7006      00006          1126          OI    6(R7),X'06'           TURN ON SPECIAL USE BITS         01075001
000BD0 5080 C0C0            020C0    1127          ST    R8,PFA                SAVE CURRENT PTR                 01076001
000BD4 07FE                          1128          BR    R14                   RETURN                           01077001
                                     1129 *                                                                     01078001
000BD6 45F0 AC36            00C36    1130 CRIMAN1  BAL   R15,CRIFLOW           DELETE MOST EMBRACING FOR-STAT   01079001
000BDA 5980 C0C4            020C4    1131          C     R8,PFANO              ALL CRIDTAB DELETED ?            01080001
000BDE 4770 AB98            00B98    1132          BNE   CRIMAN2               NO                               01081001
000BE2 9200 C0B1      020B1          1133          MVI   ZFORTEST,0            NO MORE CRIDTAB ENT TO BE DONE   01082001
000BE6 07FE                          1134          BR    R14                                                    01083001
                                     1135 *                                                                     01084001
000BE8 9102 7007      00007          1136 CRIMAC   TM    7(R7),X'02'           INTEGER ?                        01085001
000BEC 4780 AC10            00C10    1137          BZ    CRIMAC1               YES                              01086001
000BF0 5850 C0CC            020CC    1138          L     R5,ZFSPTR             CURRENT FSTAB PTR                01087001
000BF4 9680 5000      00000          1139          OI    0(R5),X'80'           SET BIT FOR ELEMENTARY LOOP      01088001
000BF8 5980 C0C8            020C8    1140 CRIMAC4  C     R8,PFAMAX             OVERFLOW ?                       01089001
000BFC 4780 AC20            00C20    1141          BE    CRIMAC2               YES                              01090001
000C00 4180 8009            00009    1142 CRIMAC3  LA    R8,9(,R8)             UPDATE CURRENT PTR               01091001
000C04 9280 C0B1      020B1          1143          MVI   ZFORTEST,X'80'        INDICATE CONTROL VAR TREATED     01092001
000C08 9280 8004      00004          1144          MVI   4(R8),X'80'           SET BIT FOR CONTROLLED VAR       01093001
000C0C 47F0 ABB0            00BB0    1145          B     CRIMA2                                                 01094001
                                     1146 *                                                                     01095001
000C10 5980 C0C4            020C4    1147 CRIMAC1  C     R8,PFANO              NESTED FOR STATEMENT ?           01096001
000C14 4780 AC00            00C00    1148          BE    CRIMAC3               NO                               01097001
000C18 4590 AE18            00E18    1149          BAL   R9,LETRAF             MAKE LVTAB ENTRY                 01098001
000C1C 47F0 ABF8            00BF8    1150          B     CRIMAC4                                                01099001
                                     1151 *                                                                     01100001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000C20 45F0 AC36            00C36  1152 CRIMAC2  BAL   R15,CRIFLOW         CRIDTAB OVERFLOW                 01101001
000C24 47F0 AC00            00C00  1153          B     CRIMAC3                                              01102001
                                   1154 *                                                                   01103001
000C28 5850 C0CC            020CC  1155 CRIMA1   L     R5,ZFSPTR           CURRENT FSTAB PTR                01104001
000C2C 96F0 5000      00000        1156          OI    0(R5),NORMAL        NORMAL LOOP                      01105001
000C30 9200 C0B1      020B1        1157          MVI   ZFORTEST,0          NO MORE CRIDTAB ENTRIES          01106001
000C34 07FE                        1158          BR    R14                 RETURN                           01107001
                                   1159 *                                                                   01108001
                                   1160 *        CRIFLOW                                                    01109001
                                   1161 *                                                                   01110001
                                   1162 *        THE SUBROUTINE IS ENTERED AT CRIDTAB OVERFLOW TO           01111001
                                   1163 *        DELETE ALL CRIDTAB ENTRIES BELONGING TO THE MOST           01112001
                                   1164 *        EMBRACING FOR STATEMENT                                    01113001
                                   1165 *                                                                   01114001
                                   1166 *        RETURN VIA R15                                             01115001
                                   1167 *        WORK REG R1, R2, R9                                        01116001
                                   1168 *                                                                   01117001
000C36 5820 C0D0            020D0  1169 CRIFLOW  L     R2,ZFOCRI           CRIDTAB START ADDR               01118001
000C3A D500 2000 8000 00000 00000  1170          CLC   0(1,R2),0(R8)       ALL ENTRIES FROM SAME FOR ST ?   01119001
000C40 4780 AD00            00D00  1171          BE    DELCRIV             YES, DELETE WHOLE CRIDTAB        01120001
000C44 D200 C0B4 2000 020B4 00000  1172          MVC   FSNEMBR(1),0(R2)    SAVE MOST EMBRACING FSN          01121001
000C4A D500 2000 C0B4 00000 020B4  1173 CRIFLOW1 CLC   0(1,R2),FSNEMBR     ENTRY OF MOST EMBRACING FOR ST ? 01122001
000C50 4770 AC92            00C92  1174          BNE   CRIFLOW2            NO                               01123001
000C54 9120 2004      00004        1175          TM    4(R2),X'20'         SUBSEQUENT CHAINED ENTRY ?       01124001
000C58 4710 AC76            00C76  1176          BO    CRIFLOW3            YES                              01125001
000C5C D201 C182 2005 02182 00005  1177          MVC   ALIGNH(2),5(R2)     ADDR ITAB ENTRY                  01126001
000C62 5850 C180            02180  1178          L     R5,ALIGN                                             01127001
000C66 5A50 BFF4            01FF4  1179          A     R5,ZIBSTAO                                           01128001
000C6A 94F9 5006      00006        1180          NI    6(R5),X'F9'         SET SPECIAL USE BITS TO 00       01129001
000C6E 4120 2009            00009  1181 CRIFLOW4 LA    R2,9(0,R2)          ADDR NEXT CRIDTAB ENTRY          01130001
000C72 47F0 AC4A            00C4A  1182          B     CRIFLOW1                                             01131001
                                   1183 *                                                                   01132001
000C76 D201 C182 2007 02182 00007  1184 CRIFLOW3 MVC   ALIGNH(2),7(R2)     ADDR CHAINED ENTRY               01133001
000C7C 5850 C180            02180  1185          L     R5,ALIGN                                             01134001
000C80 5A50 C0D0            020D0  1186          A     R5,ZFOCRI                                            01135001
000C84 94B0 5004      00004        1187          NI    4(R5),X'B0'         TURN OFF BIT FOR PRECEED ENTRY   01136001
000C88 D201 5005 2005 00005 00005  1188          MVC   5(2,R5),5(R2)       INSERT RELATIVE ITAB ADDR        01137001
000C8E 47F0 AC6E            00C6E  1189          B     CRIFLOW4                                             01138001
                                   1190 *                                                                   01139001
000C92 1B55                        1191 CRIFLOW2 SR    R5,R5               ADDR FSTAB ENTRY OF DEL FOR      01140001
000C94 4350 C0B4            020B4  1192          IC    R5,FSNEMBR                                           01141001
000C98 4155 D478            00478  1193          LA    R5,ZFOSTA(R5)                                        01142001
000C9C 96F0 5000      00000        1194          OI    0(R5),NORMAL        NORMAL LOOP                      01143001
000CA0 5890 C0D0            020D0  1195          L     R9,ZFOCRI           CRIDTAB START ADDR               01144001
000CA4 1812                        1196          LR    R1,R2                                                01145001
000CA6 1B19                        1197          SR    R1,R9               GET LENGTH OF DELETED PART       01146001
                                   1198 *                                                                   01147001
000CA8 9140 2004      00004        1199 CRIFLOW5 TM    4(R2),X'40'         PRECEEDING CRIDTAB ENTRY ?       01148001
000CAC 4780 ACC6            00CC6  1200          BZ    CRIFLOW6            NO                               01149001
000CB0 D201 C182 2005 02182 00005  1201          MVC   ALIGNH(2),5(R2)     DECREASE CHAIN ADDR              01150001
000CB6 5850 C180            02180  1202          L     R5,ALIGN                                             01151001
000CBA 1B51                        1203          SR    R5,R1                                                01152001
000CBC 5050 C180            02180  1204          ST    R5,ALIGN                                             01153001
000CC0 D201 2005 C182 00005 02182  1205          MVC   5(2,R2),ALIGNH                                       01154001
000CC6 9120 2004      00004        1206 CRIFLOW6 TM    4(R2),X'20'         SUBSEQUENT CRITAB ENTRY ?        01155001
000CCA 4780 ACE4            00CE4  1207          BZ    CRIFLOW7                                             01156001
000CCE D201 C182 2007 02182 00007  1208          MVC   ALIGNH(2),7(R2)     DECREASE CHAIN ADDR              01157001
000CD4 5850 C180            02180  1209          L     R5,ALIGN                                             01158001
000CD8 1B51                        1210          SR    R5,R1                                                01159001
000CDA 5050 C180            02180  1211          ST    R5,ALIGN                                             01160001
000CDE D201 2007 C182 00007 02182  1212          MVC   7(2,R2),ALIGNH                                       01161001
000CE4 D208 9000 2000 00000 00000  1213 CRIFLOW7 MVC   0(9,R9),0(R2)       MOVE ENTRY DOWN IN CRIDTAB       01162001
000CEA 1928                        1214          CR    R2,R8               LAST ENTRY ?                     01163001
000CEC 4780 ACFC            00CFC  1215          BE    CRIFLOW8            YES                              01164001
000CF0 4120 2009            00009  1216          LA    R2,9(,R2)           ADDR NEXT ENTRY                  01165001
000CF4 4190 9009            00009  1217          LA    R9,9(,R9)                                            01166001
000CF8 47F0 ACA8            00CA8  1218          B     CRIFLOW5                                             01167001
                                   1219 *                                                                   01168001
000CFC 1B81                        1220 CRIFLOW8 SR    R8,R1               GET ADDR OF LAST CRIDTAB-ENT     01169001
000CFE 07FF                        1221          BR    R15                                                  01170001
                                   1222 *                                                                   01171001
                                   1223 *        DELCRIV                                                    01172001
                                   1224 *                                                                   01173001
                                   1225 *        ROUTINE TO DELETE ALL ENTRIES IN CRIDTAB AND TURN OFF      01174001
                                   1226 *        THE SPECIAL USE BITS OF CORRESPONDING ITAB ENTRY. ALL      01175001
                                   1227 *        FOR-STATEMENTS WITH CRIDTAB ENTRIES WILL BE CLASSIFIED     01176001
                                   1228 *        NORMAL                                                     01177001
                                   1229 *                                                                   01178001
                                   1230 *        RETURN VIA R15                                             01179001
                                   1231 *        INITIALIZED REG R8                                         01180001
                                   1232 *                                                                   01181001
000D00 5850 C0D0            020D0  1233 DELCRIV  L     R5,ZFOCRI           CRIDTAB START ADDR               01182001
000D04 1B66                        1234 DELCRIV1 SR    R6,R6               ADDR FSTAB ENTRY                 01183001
000D06 4360 5000            00000  1235          IC    R6,0(,R5)                                            01184001
000D0A 4166 D478            00478  1236          LA    R6,ZFOSTA(R6)                                        01185001
000D0E 96F0 6000      00000        1237          OI    0(R6),NORMAL        CLASSIFIED NORMAL                01186001
000D12 9140 5004      00004        1238          TM    4(R5),X'40'         IDEN CRIT IN EMBR FOR-STAT ?     01187001
000D16 4710 AD2C            00D2C  1239          BO    DELCRIV2            YES, ITAB ENTRY ALREADY NON CRI  01188001
000D1A D201 C182 5005 02182 00005  1240          MVC   ALIGNH(2),5(R5)     ADDR ITAB ENTRY                  01189001
000D20 5860 C180            02180  1241          L     R6,ALIGN                                             01190001
000D24 5A60 BFF4            01FF4  1242          A     R6,ZIBSTAO                                           01191001
000D28 94F9 6006      00006        1243          NI    6(R6),X'F9'         CLEAR SPEC USE BITS              01192001
000D2C 5950 C0C0            020C0  1244 DELCRIV2 C     R5,PFA              LAST CRIDTAB ENTRY ?             01193001
000D30 4780 AD3C            00D3C  1245          BE    DELCRIV3            YES                              01194001
000D34 4150 5009            00009  1246          LA    R5,9(,R5)           ADDR NEXT CRIDTAB ENTRY          01195001
000D38 47F0 AD04            00D04  1247          B     DELCRIV1                                             01196001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                           X390 3.1.04  2012/08/17 13.13

                                   1248 *                                                                        01197001
000D3C 5880 C0C4            020C4  1249 DELCRIV3 L     R8,PFANO                                                  01198001
000D40 5080 C0C0            020C0  1250          ST    R8,PFA                                                    01199001
000D44 07FF                        1251          BR    R15                                                       01200001
                                   1252 *                                                                        01201001
                                   1253 *        CRIFODEL                                                        01202001
                                   1254 *                                                                        01203001
                                   1255 *        ROUTINE TO DELETE THE CRIDTAB ENTRIES OF THE LAST FOR           01204001
                                   1256 *        STATEMENT                                                       01205001
                                   1257 *                                                                        01206001
                                   1258 *        RETURN VIA R15 WORK REG R8                                      01207001
                                   1259 *                                                                        01208001
000D46 5880 C0C0            020C0  1260 CRIFODEL L     R8,PFA               POINTER TO LAST CRIDTAB-ENTRY        01209001
000D4A D200 AD59 8000 00D59 00000  1261          MVC   CRIFODS+1(1),0(R8)   INSERT FOR STATEMENT NUMBER          01210001
000D50 5980 C0C4            020C4  1262 CRIFOD1  C     R8,PFANO             CRIDTAB EMPTY ?                      01211001
000D54 4780 AD98            00D98  1263          BE    CRIFOD4              YES, RETURN                          01212001
000D58 9500 8000      00000        1264 CRIFODS  CLI   0(R8),0              NEW FORSTATEMENT, OLD FSN INSER      01213001
000D5C 4770 AD98            00D98  1265          BNE   CRIFOD4              YES, RETURN                          01214001
000D60 9140 8004      00004        1266          TM    4(R8),X'40'          IDENTIFIER USED IN EMBR FOR-ST       01215001
000D64 4710 AD82            00D82  1267          BO    CRIFOD2              YES                                  01216001
000D68 D201 C182 8005 02182 00005  1268          MVC   ALIGNH(2),5(R8)      CLEAR SPEC USE BITS IN CRIDTAB       01217001
000D6E 5850 C180            02180  1269          L     R5,ALIGN                                                  01218001
000D72 5A50 BFF4            01FF4  1270          A     R5,ZIBSTAO           ABSOLUTE ITAB ADDR                   01219001
000D76 94F9 5006      00006        1271          NI    6(R5),X'F9'          CLEAR SPECIAL USE BITS IN ITAB       01220001
000D7A 4B80 BF62            01F62  1272 CRIFOD3  SH    R8,KH9               POINT TO PRECEEDING ENTRY            01221001
000D7E 47F0 AD50            00D50  1273          B     CRIFOD1                                                   01222001
                                   1274 *                                                                        01223001
000D82 5850 C0D0            020D0  1275 CRIFOD2  L     R5,ZFOCRI            TURN OFF BIT FOR SUBSEQ ENTRY        01224001
000D86 D201 C182 8005 02182 00005  1276          MVC   ALIGNH(2),5(R8)      ADDR OF PREVIOUS CRIDTAB-ENT         01225001
000D8C 5A50 C180            02180  1277          A     R5,ALIGN                                                  01226001
000D90 94CF 5004      00004        1278          NI    4(R5),X'CF'          TURN OFF BIT FOR SUBSEQ ENTRY        01227001
000D94 47F0 AD7A            00D7A  1279          B     CRIFOD3              GET NEXT ENTRY                       01228001
                                   1280 *                                                                        01229001
000D98 5080 C0C0            020C0  1281 CRIFOD4  ST    R8,PFA                                                    01230001
000D9C 07FF                        1282          BR    R15                                                       01231001
                                   1283 *                                                                        01232001
                                   1284 *        SUCRIDEL                                                        01233001
                                   1285 *                                                                        01234001
                                   1286 *        THE SUBROUTINE IS ENTERED WHEN UNOPTIMIZABLE SUBSCRIPT          01235001
                                   1287 *        EXPRESSION IS FOUND. A SCAN BETWEEN THE TWO LAST                01236001
                                   1288 *        SUBSCRIPT OPERATORS IS DONE IN THE OUTPUT BUFFER. IF A          01237001
                                   1289 *        CONTROLLED CRITICAL IDENTIFIER IS FOUND, CORRESPONDING          01238001
                                   1290 *        ENTRY IN FSTAB IS MADE ELEMENTARY. OTHERWISE NO ACTION          01239001
                                   1291 *                                                                        01240001
                                   1292 *        RETURN VIA R15                                                  01241001
                                   1293 *        WORK REG R1, R2, R14                                            01242001
                                   1294 *                                                                        01243001
000D9E D503 C0C0 C0C4 020C0 020C4  1295 SUCRIDEL CLC   PFA(4),PFANO         CRIDTAB EMPTY                        01244001
000DA4 078F                        1296          BER   R15                  YES, RETURN                          01245001
000DA6 4120 4001            00001  1297          LA    R2,1(,R4)            ADDR OF LAST SUBSCR OPERAND          01246001
000DAA 5810 C068            02068  1298          L     R1,ZBRACK            ADDR OF FIRST SUBSCR OPERAND         01247001
000DAE 4110 1001            00001  1299 SUCRID1  LA    R1,1(,R1)            CHECK NEXT BYTE                      01248001
000DB2 1912                        1300 SUCRID2  CR    R1,R2                END OF SCAN ?                        01249001
000DB4 07BF                        1301          BNLR  R15                  YES, RETURN                          01250001
000DB6 9180 1000      00000        1302          TM    0(R1),X'80'          AN OPERAND FOUND ?                   01251001
000DBA 4780 ADAE            00DAE  1303          BZ    SUCRID1              NO                                   01252001
000DBE 9106 1000      00000        1304          TM    0(R1),X'06'          CRITICAL IDENTIFIER ?                01253001
000DC2 4710 ADCE            00DCE  1305          BO    SUCRID4              YES                                  01254001
000DC6 4110 1005            00005  1306 SUCRID3  LA    R1,5(,R1)            ADDR NEXT ELEMENT                    01255001
000DCA 47F0 ADB2            00DB2  1307          B     SUCRID2                                                   01256001
                                   1308 *                                                                        01257001
                                   1309 *        TREATMENT OF CRITICAL IDENTIFIERS                               01258001
                                   1310 *                                                                        01259001
000DCE 58E0 C0C0            020C0  1311 SUCRID4  L     R14,PFA              ADDR OF LAST CRIDTAB ENTRY           01260001
000DD2 41E0 E009            00009  1312          LA    R14,9(,R14)                                               01261001
000DD6 4BE0 BF62            01F62  1313 SUCRID5  SH    R14,KH9              FIND IDENTIFIER IN CRIDTAB           01262001
000DDA D502 E001 1002 00001 00002  1314          CLC   1(3,R14),2(R1)       IDENTIFIER FOUND ?                   01263001
000DE0 4770 ADD6            00DD6  1315          BNE   SUCRID5              NO                                   01264001
                                   1316 *                                                                        01265001
000DE4 9180 E004      00004        1317 SUCRID6  TM    4(R14),X'80'         CONTROLLED VARIABLE ?                01266001
000DE8 4780 ADFE            00DFE  1318          BZ    SUCRID7              NO                                   01267001
000DEC 4150 D478            00478  1319          LA    R5,ZFOSTA            ADDR OF FSTAB                        01268001
000DF0 D200 ADF9 E000 00DF9 00000  1320          MVC   *+9(1),0(R14)        DISPLACEMENT EQUALS FOR NUMBER       01269001
000DF6 9680 5000      00000        1321          OI    0(R5),X'80'          ELEMENTARY LOOP                      01270001
000DFA 47F0 ADC6            00DC6  1322          B     SUCRID3                                                   01271001
                                   1323 *                                                                        01272001
                                   1324 *        FIND CHAINED CONTROLLED VARIABLE                                01273001
                                   1325 *                                                                        01274001
000DFE 9140 E004      00004        1326 SUCRID7  TM    4(R14),X'40'         ANY CHAINING ?                       01275001
000E02 4780 ADC6            00DC6  1327          BZ    SUCRID3              NO                                   01276001
000E06 D201 C182 E005 02182 00005  1328          MVC   ALIGNH(2),5(R14)     CRIDTAB CHAIN                        01277001
000E0C 58E0 C180            02180  1329          L     R14,ALIGN                                                 01278001
000E10 5AE0 C0D0            020D0  1330          A     R14,ZFOCRI           ADDR CHAINED ENTRY                   01279001
000E14 47F0 ADE4            00DE4  1331          B     SUCRID6                                                   01280001
                                   1332 *                                                                        01281001
                                   1333 *        LETRAF                                                          01282001
                                   1334 *                                                                        01283001
                                   1335 *        MAKE ENTRIES IN LVTAB CORRESPONDING TO ALL                      01284001
                                   1336 *        SUBSCRIPTABLE NESTED FOR-STATEMENTS                             01285001
                                   1337 *                                                                        01286001
                                   1338 *        RETURN VIA R9                                                   01287001
                                   1339 *        RECIEVED REG R7, WORK REG R1, R2, R6                            01288001
                                   1340 *                                                                        01289001
000E18 95FF C0B2      020B2        1341 LETRAF   CLI   ZLVOV,X'FF'          TABLE OVERFLOW OCCURED ?             01290001
000E1C 0789                        1342          BER   R9                   YES                                  01291001
000E1E 5810 C0C0            020C0  1343          L     R1,PFA               ADDR OF LAST CRIDTAB ENTRY           01292001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000E22 1821                          1344 LETRAF1  LR    R2,R1                                                    01293001
000E24 4150 D478             00478   1345          LA    R5,ZFOSTA                                                01294001
000E28 D200 AE31 1000 00E31 00000    1346          MVC   *+9(1),0(R1)           ADDR ACTUAL FSTAB ENTRY           01295001
000E2E 9140 5000       00000         1347          TM    0(R5),NOSUOP                                             01296001
000E32 4710 AE78             00E78   1348          BO    LETRAF2                                                  01297001
000E36 5860 BFB0             01FB0   1349          L     R6,ZLEVA                                                 01298001
000E3A 5960 BFAC             01FAC   1350          C     R6,ZLESTA              WRITE BEEN ISSUED ?               01299001
000E3E 4770 AE5C             00E5C   1351          BNE   LETRAF5                NO                                01300001
000E42 4550 B5D6             015D6   1352          BAL   R5,CHECK               YES, CHECK                        01301001
000E46 D503 BFC0 D104 01FC0 00104    1353          CLC   LVLENGTH(4),LVTAB40S   MORE OUTPUT ALLOWED ?             01302001
000E4C 47B0 AEB4             00EB4   1354          BNL   LETRAF4                NO                                01303001
000E50 4850 BFC4             01FC4   1355          LH    R5,LVCNT               STEP RECORD COUNTER               01304001
000E54 4150 5001             00001   1356          LA    R5,1(,R5)                                                01305001
000E58 4050 BFC4             01FC4   1357          STH   R5,LVCNT                                                 01306001
000E5C 4160 6004             00004   1358 LETRAF5  LA    R6,4(,R6)                                                01307001
000E60 D200 6000 1000 00000 00000    1359          MVC   0(1,R6),0(R1)          PLUG IN FS NUMBER                 01308001
000E66 D202 6001 7008 00001 00008    1360          MVC   1(3,R6),8(R7)          PLUG IN ADDR PART OF CUR ID       01309001
000E6C 5960 BFB4             01FB4   1361          C     R6,ZLEMAX              LVTAB FILLED UP ?                 01310001
000E70 4780 AE90             00E90   1362          BE    LETRAF3                YES                               01311001
000E74 5060 BFB0             01FB0   1363 LETRAF6  ST    R6,ZLEVA                                                 01312001
000E78 4B10 BF62             01F62   1364 LETRAF2  SH    R1,KH9                 GET NEXT CRIDTAB ENTRY            01313001
000E7C 5910 C0C4             020C4   1365          C     R1,PFANO               BEGINNING OF CRIDTAB ?            01314001
000E80 0789                          1366          BER   R9                     YES, RETURN                       01315001
000E82 D500 1000 2000 00000 00000    1367          CLC   0(1,R1),0(R2)          AN ENTRY IN SAME FS ?             01316001
000E88 4780 AE78             00E78   1368          BE    LETRAF2                SAME                              01317001
000E8C 47F0 AE22             00E22   1369          B     LETRAF1                NEW                               01318001
                                     1370 *                                                                       01319001
000E90 4550 B5D6             015D6   1371 LETRAF3  BAL   R5,CHECK               CHECK POSSIBLE WRITE              01320001
000E94 5850 BFB8             01FB8   1372          L     R5,LVSTRT              WRITE START ADDR                  01321001
000E98 5860 D0F8             000F8   1373          L     R6,LVTAB30S            LENGTH OF WRITE                   01322001
000E9C 45F0 B5F8             015F8   1374          BAL   R15,WRITE              WRITE                             01323001
000EA0 5850 BFC0             01FC0   1375          L     R5,LVLENGTH            LENGTH OF LVTAB                   01324001
000EA4 5A50 D0F8             000F8   1376          A     R5,LVTAB30S            BUFFER LENGTH                     01325001
000EA8 5050 BFC0             01FC0   1377          ST    R5,LVLENGTH                                              01326001
000EAC 5860 BFAC             01FAC   1378          L     R6,ZLESTA              START ADDR OF LVTAB               01327001
000EB0 47F0 AE74             00E74   1379          B     LETRAF6                                                  01328001
                                     1380 *                                                                       01329001
000EB4 45F0 B678             01678   1381 LETRAF4  BAL   R15,TABOFLO                                              01330001
000EB8 45F0 B52C             0152C   1382          BAL   R15,MOVERRO                                              01331001
000EBC 07F9                          1383          BR    R9                                                       01332001
                                     1384 *                                                                       01333001
                                     1385 *        SUSCRITE                                                       01334001
                                     1386 *                                                                       01335001
                                     1387 *        ROUTINE TO CHECK IF AN SUBSCRIPT EXPRESSION IS                 01336001
                                     1388 *        OPTIMIZABLE IN WHAT CASE AN SUTAB-ENTRY IS DONE, OTHER         01337001
                                     1389 *        SUBROUTINE SUCRIDEL IS ENTERED BEFORE RETURN                   01338001
                                     1390 *                                                                       01339001
                                     1391 *        RETURN VIA R9                                                  01340001
                                     1392 *        WORK REG R2, R1, R2, R7, R8, R1                                01341001
                                     1393 *        SUBROUTINE LINKS R15, R14, R14                                 01342001
                                     1394 *                                                                       01343001
000EBE 5810 C068             02068   1395 SUSCRITE L     R1,ZBRACK              INITIALIZE CURRENT POINTER        01344001
000EC2 1854                          1396          LR    R5,R4                  ADDR OF LAST BYTE OF SUBSCR       01345001
000EC4 4B50 BF5C             01F5C   1397          SH    R5,KH5                 ADDR OPERATOR BEFOR LAST OPD      01346001
000EC8 5050 C04C             0204C   1398          ST    R5,SUBEND                                                01347001
000ECC 9501 1001       00001         1399          CLI   1(R1),XFMINUS          SUBSCRIPT START WITH + OR -       01348001
000ED0 4720 AED8             00ED8   1400          BH    SUB1                   NO                                01349001
000ED4 4110 1001             00001   1401          LA    R1,1(,R1)              POINT TO BYTE BEFORE OPERAND      01350001
000ED8 5910 C04C             0204C   1402 SUB1     C     R1,SUBEND              ANY OPERAND IN SUBSCRIPT ?        01351001
000EDC 0729                          1403          BHR   R9                     NO, RETURN                        01352001
000EDE 45F0 B07C             0107C   1404          BAL   R15,OPERANDR           TEST OPERAND                      01353001
000EE2 5910 C04C             0204C   1405          C     R1,SUBEND              END OF SUBSCRIPT                  01354001
000EE6 4780 AEFC             00EFC   1406          BE    SUBONE                                                   01355001
000EEA 9502 1006       00006         1407          CLI   6(R1),XFASTER          WHAT FOLLOWS FIRST OPERAND        01356001
000EEE 4740 AF80             00F80   1408          BL    SUBPM                  PLUS OR MINUS ?                   01357001
000EF2 4780 AFE0             00FE0   1409          BE    SUBAST                 ASTERISK                          01358001
                                     1410 *                                                                       01359001
                                     1411 *        UNOPTIMIZABLE SUBSCRIPT EXPRESSION                             01360001
                                     1412 *                                                                       01361001
000EF6 45F0 AD9E             00D9E   1413 SUBNOOP  BAL   R15,SUCRIDEL           HANDLE UNOPTIMIZABLE EXPRESSION   01362001
000EFA 07F9                          1414          BR    R9                     RETURN                            01363001
                                     1415 *                                                                       01364001
                                     1416 *        ONLY ONE OPERAND                                               01365001
                                     1417 *                                                                       01366001
000EFC 1282                          1418 SUBONE   LTR   R8,R2                  CONTROLLED VARIABLE ?             01367001
000EFE 4720 AF6A             00F6A   1419          BP    SUBONE3                YES                               01368001
000F02 D205 C050 1000 02050 00000    1420          MVC   ADDEND(6),0(R1)        OPERAND IS ADDEND                 01369001
000F08 D205 C056 C05C 02056 0205C    1421          MVC   FACTOR(6),ZEROELEM     SET FACTOR TO ZERO                01370001
000F0E 5880 C0D0             020D0   1422          L     R8,ZFOCRI              ADDR OF LAST CRIDTAB ENTRY        01371001
000F12 5820 C020             02020   1423          L     R2,ZARSPO              ADDR CURRENT ARIDSTAB ENTRY       01372001
000F16 1B55                          1424 SUBONE1  SR    R5,R5                  GET FSN                           01373001
000F18 4350 8000             00000   1425          IC    R5,0(,R8)                                                01374001
000F1C 4250 AF5F             00F5F   1426          STC   R5,OLDFSN                                                01375001
000F20 4165 D478             00478   1427          LA    R6,ZFOSTA(R5)          ADDR FSTAB ENTRY                  01376001
000F24 9140 6000       00000         1428          TM    0(R6),X'40'            SUBSCRIPT OPTIMIZATION POSSIBLE   01377001
000F28 4710 AF54             00F54   1429          BO    SUBONE2                                                  01378001
000F2C 5820 C020             02020   1430          L     R2,ZARSPO              ADDR LAST ARIDSTACK ENTRY         01379001
000F30 4165 D5D0             005D0   1431          LA    R6,SPTAB(R5)           ADDR SPTAB ENTRY                  01380001
000F34 D500 6000 2000 00000 00000    1432          CLC   0(1,R6),0(R2)          SCOPE OF ARRAY OK                 01381001
000F3A 4740 AF54             00F54   1433          BL    SUBONE2                NO                                01382001
000F3E 9130 C052       02052         1434          TM    ADDEND+2,X'30'         CONSTANT ?                        01383001
000F42 4780 AF50             00F50   1435          BZ    SUBONE4                YES                               01384001
000F46 D500 6000 C053 00000 02053    1436          CLC   0(1,R6),ADDEND+3       SCOPE TEST OF ADDEND              01385001
000F4C 4740 AF54             00F54   1437          BL    SUBONE2                NOT OK                            01386001
000F50 45E0 B10C             0110C   1438 SUBONE4  BAL   R14,SUTABENT           MAKE SUTAB ENTRY                  01387001
000F54 5980 C0C0             020C0   1439 SUBONE2  C     R8,PFA                 END OF CRIDTAB                    01388001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                              X390 3.1.04  2012/08/17 13.13

000F58 0789                        1440          BER   R9                   YES, RETURN                    01389001
000F5A 4180 8009            00009  1441          LA    R8,9(,R8)            FIND ENCLOSED FOR STATEMENT    01390001
                      00F5F        1442 OLDFSN   EQU   *+1                                                 01391001
000F5E 9500 8000      00000        1443          CLI   0(R8),0              ENTRY TO SAME FOR STATEMENT ?  01392001
000F62 4780 AF54            00F54  1444          BE    SUBONE2              YES, CHECK NEXT ENTRY          01393001
000F66 47F0 AF16            00F16  1445          B     SUBONE1              NO, POSSIBLY NEW SUTAB ENTRY   01394001
                                   1446 *                                                              01395001
                                   1447 *        OPERAND IS CONTROLLED VARIABLE                        01396001
                                   1448 *                                                              01397001
000F6A D200 C056 1000 02056 00000  1449 SUBONE3  MVC   FACTOR(1),0(R1)      OPERATOR TO FACTOR             01398001
000F70 D204 C057 C063 02057 02063  1450          MVC   FACTOR+1(5),ONEELEM+1  SET FACTOR TO ONE            01399001
000F76 D205 C050 C05C 02050 0205C  1451 SUBONE5  MVC   ADDEND(6),ZEROELEM   SET ADDEND TO ZERO             01400001
000F7C 47F0 B01E            0101E  1452          B     SUBFIN1                                             01401001
                                   1453 *                                                              01402001
                                   1454 *        FIRST OPERAND FOLLOWED BY + OR -                      01403001
                                   1455 *                                                              01404001
000F80 D205 C050 1000 02050 00000  1456 SUBPM    MVC   ADDEND(6),0(R1)      FIRST OPERAND PROBABLY ADDEND  01405001
000F86 1872                        1457          LR    R7,R2                SAVE CRIDTAB POINTER           01406001
000F88 4110 1006            00006  1458          LA    R1,6(0,R1)           ADDR SIGN OF SECOND OPERAND    01407001
000F8C 45F0 B07C            0107C  1459          BAL   R15,OPERANDR         CHECK SECOND OPERAND           01408001
000F90 5910 C04C            0204C  1460          C     R1,SUBEND            END OF SUBSCRIPT ?             01409001
000F94 4780 AFA8            00FA8  1461          BE    SUBPM1               YES                            01410001
000F98 9502 1006      00006        1462          CLI   6(R1),XFASTER        ASTERISK SHOULD FOLLOW         01411001
000F9C 4770 AEF6            00EF6  1463          BNE   SUBNOOP              NOT OPTIMIZABLE                01412001
000FA0 45E0 B0CE            010CE  1464          BAL   R14,SUBMULT          CHECK MULTIPLICATION           01413001
000FA4 47F0 B004            01004  1465          B     SUBFIN               TERMINATE                      01414001
                                   1466 *                                                              01415001
000FA8 1927                        1467 SUBPM1   CR    R2,R7                WHAT IS SECOND OPERAND ?       01416001
000FAA 4740 AFC4            00FC4  1468          BL    SUBPM3               ADDEND                         01417001
000FAE 4780 AFD8            00FD8  1469          BE    SUBPM4               NOT OPTIMIZABLE EXPRESSION     01418001
000FB2 1882                        1470          LR    R8,R2                ADDR CRIDTAB ENTRY OF CONTR    01419001
000FB4 D200 C056 1000 02056 00000  1471          MVC   FACTOR(1),0(R1)      SIGN OF FACTOR                 01420001
000FBA D204 C057 C063 02057 02063  1472 SUBPM2   MVC   FACTOR+1(5),ONEELEM+1  SET FACTOR TO ONE            01421001
000FC0 47F0 B004            01004  1473          B     SUBFIN                                              01422001
                                   1474 *                                                              01423001
000FC4 1887                        1475 SUBPM3   LR    R8,R7                SECOND OPERAND ADDEND, SHIFT   01424001
000FC6 1872                        1476          LR    R7,R2                                               01425001
000FC8 D200 C056 C050 02056 02050  1477          MVC   FACTOR(1),ADDEND     SIGN OF FACTOR                 01426001
000FCE D205 C050 1000 02050 00000  1478          MVC   ADDEND(6),0(R1)                                     01427001
000FD4 47F0 AFBA            00FBA  1479          B     SUBPM2                                              01428001
                                   1480 *                                                              01429001
000FD8 1287                        1481 SUBPM4   LTR   R8,R7                CONTROLLED VARIABLE ?          01430001
000FDA 0789                        1482          BZR   R9                   NO                             01431001
000FDC 47F0 B06C            0106C  1483          B     SUBFIN4              YES                            01432001
                                   1484 *                                                              01433001
                                   1485 *        FIRST OPERAND FOLLOWED BY ASTERISK                    01434001
                                   1486 *                                                              01435001
000FE0 45E0 B0CE            010CE  1487 SUBAST   BAL   R14,SUBMULT          CHECK MULTIPLICATION           01436001
000FE4 5910 C04C            0204C  1488          C     R1,SUBEND            END OF SUBSCRIPT ?             01437001
000FE8 4780 AF76            00F76  1489          BE    SUBONE5              YES, SET ADDEND TO ZERO        01438001
000FEC 9501 1006      00006        1490          CLI   6(R1),XFMINUS        PLUS OR MINUS                  01439001
000FF0 4720 AEF6            00EF6  1491          BH    SUBNOOP              NO, NO SUBSCRIPT OPTIMIZATION  01440001
000FF4 4110 1006            00006  1492          LA    R1,6(,R1)            ADDR SIGN                      01441001
000FF8 45F0 B07C            0107C  1493          BAL   R15,OPERANDR         CHECK OPERAND                  01442001
000FFC D205 C050 1000 02050 00000  1494          MVC   ADDEND(6),0(R1)      SAVE ADDEND                    01443001
001002 1872                        1495          LR    R7,R2                LAST OPERAND WAS ADDEND        01444001
                                   1496 *                                                              01445001
001004 1277                        1497 SUBFIN   LTR   R7,R7                ADDEND CONTROLLED VARIABLE ?   01446001
001006 4780 B01E            0101E  1498          BZ    SUBFIN1              NO                             01447001
00100A 1B55                        1499          SR    R5,R5                YES, INDICATE ELEMENTARY LOOP  01448001
00100C 4350 7000            00000  1500          IC    R5,0(,R7)                                           01449001
001010 4165 D478            00478  1501          LA    R6,ZFOSTA(R5)                                       01450001
001014 9680 6000      00000        1502          OI    0(R6),X'80'                                         01451001
001018 1987                        1503          CR    R8,R7                OPTIMIZATION POSSIBLE ?        01452001
00101A 47D0 B06C            0106C  1504          BNH   SUBFIN4              NO                             01453001
00101E 1B55                        1505 SUBFIN1  SR    R5,R5                FSN OF CONTROLLED VAR TO RE6   01454001
001020 4350 8000            00000  1506          IC    R5,0(0,R8)                                          01455001
001024 5820 C020            02020  1507          L     R2,ZARSPO            ADDR LAST ARIDSTAB-ENTRY       01456001
001028 4165 D478            00478  1508          LA    R6,ZFOSTA(R5)        ADDR FSTAB-ENTRY               01457001
00102C 9140 6000      00000        1509          TM    0(R6),X'40'          SUBSCRIPT OPTIMIZATION POSS ?  01458001
001030 4710 B06C            0106C  1510          BO    SUBFIN4              NO, NO OPTIMIZATION            01459001
001034 4165 D5D0            005D0  1511          LA    R6,SPTAB(R5)         ADDR SPTAB-ENTRY               01460001
001038 D500 6000 2000 00000 00000  1512          CLC   0(1,R6),0(R2)        SCOPE OF ARRAY OK ?            01461001
00103E 4740 B06C            0106C  1513          BL    SUBFIN4              NO, NO OPTIMIZATION            01462001
001042 9130 C058      02058        1514          TM    FACTOR+2,X'30'       FACTOR CONSTANT ?              01463001
001046 4780 B054            01054  1515          BZ    SUBFIN2              YES                            01464001
00104A D500 6000 C059 00000 02059  1516          CLC   0(1,R6),FACTOR+3     SCOPE OF FACTOR OK             01465001
001050 4740 B06C            0106C  1517          BL    SUBFIN4              NO, NO OPTIMIZATION            01466001
001054 9130 C052      02052        1518 SUBFIN2  TM    ADDEND+2,X'30'       ADDEND CONSTANT ?              01467001
001058 4780 B066            01066  1519          BZ    SUBFIN3              YES                            01468001
00105C D500 6000 C053 00000 02053  1520          CLC   0(1,R6),ADDEND+3     SCOPE OF ADDEND OK ?           01469001
001062 4740 B06C            0106C  1521          BL    SUBFIN4              NO, NO OPTIMIZATION            01470001
001066 45E0 B10C            0110C  1522 SUBFIN3  BAL   R14,SUTABENT         MAKE SUTAB ENTRY               01471001
00106A 07F9                        1523          BR    R9                   RETURN                         01472001
                                   1524 *                                                              01473001
00106C 1B55                        1525 SUBFIN4  SR    R5,R5                                               01474001
00106E 4350 8000            00000  1526          IC    R5,0(0,R8)           FSN OF CONTROLLED VARIABLE     01475001
001072 4165 D478            00478  1527          LA    R6,ZFOSTA(R5)        ADDR FSTAB ENTRY               01476001
001076 9680 6000      00000        1528          OI    0(R6),X'80'          ELEMENTARY LOOP                01477001
00107A 07F9                        1529          BR    R9                                                  01478001
                                   1530 *                                                              01479001
                                   1531 *        OPERANDR                                              01480001
                                   1532 *                                                              01481001
                                   1533 *        SUBROUTINE TO SUSCRITE TO CHECK WHAT FOLLOWS AN       01482001
                                   1534 *        OPERATOR IF NOT AN INTEGER OPERAND AN ERROR EXIT IS   01483001
                                   1535 *        TAKEN. ELSE THE SETTING OF REGISTER R2 SHOWS TYPE OF  01484001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   1536 *        OPERAND                                                       01485001
                                   1537 *                                                                      01486001
                                   1538 *        INITIALIZED REG R2                                            01487001
                                   1539 *                                                                      01488001
00107C 9180 1001      00001        1540 OPERANDR TM    1(R1),X'80'          OPERAND ?                          01489001
001080 4780 AEF6            00EF6  1541          BZ    SUBNOOP              NO                                 01490001
001084 91CE 1002      00002        1542          TM    2(R1),X'CE'          INTEGER ?                          01491001
001088 4740 AEF6            00EF6  1543          BM    SUBNOOP              NO                                 01492001
00108C 9106 1001      00001        1544          TM    1(R1),X'06'          CRITICAL IDENTIFIER ?              01493001
001090 4710 B098            01098  1545          BO    OPERAND1             YES                                01494001
001094 1B22                        1546 OPERAND4 SR    R2,R2                INDICATE NO-CONTROLLED VARIABLE    01495001
001096 07FF                        1547          BR    R15                  RETURN                             01496001
                                   1548 *                                                                      01497001
                                   1549 *        OPERAND CONTROLLED VARIABLE ?                                 01498001
                                   1550 *                                                                      01499001
001098 5820 C0C0            020C0  1551 OPERAND1 L     R2,PFA               ADDR OF LAST CRIDTAB ENTRY         01500001
00109C 4120 2009            00009  1552          LA    R2,9(,R2)            INITIALIZE LOOP                    01501001
0010A0 4B20 BF62            01F62  1553 OPERAND2 SH    R2,KH9               GET NEXT ENTRY                     01502001
0010A4 D502 2001 1003 00001 00003  1554          CLC   1(3,R2),3(R1)        OPERAND FOUND                      01503001
0010AA 4770 B0A0            010A0  1555          BNE   OPERAND2             NO, GET NEXT CRIDTAB ENTRY         01504001
                                   1556 *                                                                      01505001
0010AE 9180 2004      00004        1557 OPERAND3 TM    4(R2),X'80'          CONTROLLED VARIABLE ?              01506001
0010B2 071F                        1558          BOR   R15                  YES                                01507001
0010B4 9140 2004      00004        1559          TM    4(R2),X'40'          PRECEEDING CRITICAL IDENTIFIER ? 01508001
0010B8 4780 B094            01094  1560          BZ    OPERAND4             NO                                 01509001
0010BC D201 C182 2005 02182 00005  1561          MVC   ALIGNH(2),5(R2)      GET CRIDTAB CHAIN                  01510001
0010C2 5820 C180            02180  1562          L     R2,ALIGN             GET ADDR OF CHAINED ENTRY          01511001
0010C6 5A20 C0D0            020D0  1563          A     R2,ZFOCRI                                               01512001
0010CA 47F0 B0AE            010AE  1564          B     OPERAND3             CHECK THIS ENTRY                   01513001
                                   1565 *                                                                      01514001
                                   1566 *        SUBMULT                                                       01515001
                                   1567 *                                                                      01516001
                                   1568 *        SUBROUTINE TO SUSCRITE TO CHECK WHAT FOLLOWS AN               01517001
                                   1569 *        ASTERISK IF NOT INTEGER FACTOR TIMES INTEGER CONTROLLED       01518001
                                   1570 *        VARIABLE AN ERROR EXIT IS TAKEN. OTHERWISE REGISTER R8        01519001
                                   1571 *        AND BUCKET FACTOR ARE INITIALIZED                             01520001
                                   1572 *                                                                      01521001
                                   1573 *        INITIALIZED R8                                                01522001
                                   1574 *                                                                      01523001
0010CE D205 C056 1000 02056 00000  1575 SUBMULT  MVC   FACTOR(6),0(R1)      MOVE OPERAND TO FACTOR             01524001
0010D4 1882                        1576          LR    R8,R2                SAVE PTR                           01525001
0010D6 4110 1006            00006  1577          LA    R1,6(,R1)            ADDR NEXT OPERAND                  01526001
0010DA 45F0 B07C            0107C  1578          BAL   R15,OPERANDR         CHECK SECOND OPERAND               01527001
0010DE 1928                        1579          CR    R2,R8                WHICH OPERAND IS FACTOR ?          01528001
0010E0 4720 B102            01102  1580          BH    SUBMULT2             FIRST                              01529001
0010E4 4780 AEF6            00EF6  1581          BE    SUBNOOP              NONE, NO OPTIMIZATION              01530001
0010E8 D204 C057 1001 02057 00001  1582          MVC   FACTOR+1(5),1(R1)    SECOND, MOVE OPERAND TO FACTOR     01531001
0010EE 1222                        1583 SUBMULT1 LTR   R2,R2                FACTOR CONTROLLED VARIABLE         01532001
0010F0 078E                        1584          BZR   R14                  NO, RETURN                         01533001
0010F2 1B55                        1585          SR    R5,R5                SET FOR-LOOP OF FACTOR ELEMENT     01534001
0010F4 4350 2000            00000  1586          IC    R5,0(0,R2)           FSN OF FACTOR                      01535001
0010F8 4165 D478            00478  1587          LA    R6,ZFOSTA(R5)        ADDR FSTAB-ENTRY                   01536001
0010FC 9680 6000      00000        1588          OI    0(R6),X'80'          MAKE LOOP ELEMENTARY               01537001
001100 07FE                        1589          BR    R14                  RETURN                             01538001
                                   1590 *                                                                      01539001
001102 1852                        1591 SUBMULT2 LR    R5,R2                EXCHANGE REGISTERS                 01540001
001104 1828                        1592          LR    R2,R8                                                   01541001
001106 1885                        1593          LR    R8,R5                                                   01542001
001108 47F0 B0EE            010EE  1594          B     SUBMULT1                                                01543001
                                   1595 *                                                                      01544001
                                   1596 *        SUTABENT                                                      01545001
                                   1597 *                                                                      01546001
                                   1598 *        SUBROUTINE TO SUBSCRITE TO MAKE AN SUTAB ENTRY                01547001
                                   1599 *                                                                      01548001
00110C 5810 BF90            01F90  1600 SUTABENT L     R1,ZSUTAPO           CURRENT SUTAB PTR                  01549001
001110 5910 BF94            01F94  1601          C     R1,ZSUDAD            A WRITE MACRO BEEN GIVEN ?         01550001
001114 4770 B132            01132  1602          BNE   SUTAB1               NO                                 01551001
001118 4550 B5D6            015D6  1603          BAL   R5,CHECK             CHECK LAST OPERATION ON SYSUT3     01552001
00111C D503 BFA4 D100 01FA4 00100  1604          CLC   SULENGTH(4),SUTAB40S TABLE OVERFLOW ?                   01553001
001122 47B0 B1A0            011A0  1605          BNL   SUTAB4               YES                                01554001
001126 4850 BFA8            01FA8  1606          LH    R5,SUCNT             STEP RECORD COUNTER                01555001
00112A 4150 5001            00001  1607          LA    R5,1(,R5)                                               01556001
00112E 4050 BFA8            01FA8  1608          STH   R5,SUCNT                                                01557001
001132 4110 100E            0000E  1609 SUTAB1   LA    R1,14(,R1)           ADDR NEW SUTAB-ENTRY               01558001
001136 5010 BF90            01F90  1610          ST    R1,ZSUTAPO           SAVE SUTAB PTR                     01559001
                                   1611 *                               MAKE SUTAB ENTRY                   01560001
00113A D200 1000 8000 00000 00000  1612          MVC   0(1,R1),0(R8)        INSERT FSN                         01561001
001140 D202 1001 2000 00001 00000  1613          MVC   1(3,R1),0(R2)        ADDR PART OF ARRAY                 01562001
001146 D202 1004 C059 00004 02059  1614          MVC   4(3,R1),FACTOR+3     ADDR PART OF FACTOR                01563001
00114C D202 1007 C053 00007 02053  1615          MVC   7(3,R1),ADDEND+3     ADDR PART OF ADDEND                01564001
001152 D200 100A C025 0000A 02025  1616          MVC   10(1,R1),ZPOSIX+1    SUBSCRIPT NUMBER                   01565001
001158 9501 C056      02056        1617          CLI   FACTOR,XFMINUS       SIGN OF FACTOR MINUS ?             01566001
00115C 4770 B164            01164  1618          BNE   SUTAB2               NO                                 01567001
001160 9680 100A      0000A        1619          OI    10(R1),X'80'         YES, SET 1 BIT TO ONE              01568001
001164 9501 C050      02050        1620 SUTAB2   CLI   ADDEND,XFMINUS       SIGN OF ADDEND MINUS ?             01569001
001168 4770 B170            01170  1621          BNE   SUTAB3               NO                                 01570001
00116C 9640 100A      0000A        1622          OI    10(R1),X'40'         YES, SET 2 BIT TO ONE              01571001
001170 D202 100B 2004 0000B 00004  1623 SUTAB3   MVC   11(3,R1),4(R2)       POSITION OF OPENING BRACKET        01572001
001176 5910 BF98            01F98  1624          C     R1,ZSUTMAX           SUTAB FILLED UP                    01573001
00117A 074E                        1625          BLR   R14                                                     01574001
00117C 4550 B5D6            015D6  1626          BAL   R5,CHECK             CHECK POSSIBLE WRITE               01575001
001180 5850 BF9C            01F9C  1627          L     R5,SUSTRT            WRITE START ADDR                   01576001
001184 5860 D0F4            000F4  1628          L     R6,SUTAB30S          LENGTH OF WRITE                    01577001
001188 45F0 B5F8            015F8  1629          BAL   R15,WRITE            WRITE                              01578001
00118C 5850 BFA4            01FA4  1630          L     R5,SULENGTH          GET FULL SUTAB LENGTH              01579001
001190 5A50 D0F4            000F4  1631          A     R5,SUTAB30S                                             01580001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

001194 5050 BFA4            01FA4  1632          ST    R5,SULENGTH                                                01581001
001198 D203 BF90 BF94 01F90 01F94  1633          MVC   ZSUTAPO(4),ZSUDAD        INITIALIZE CURRENT SUTAB PTR     01582001
00119E 07FE                        1634          BR    R14                                                        01583001
                                   1635 *                                                                         01584001
0011A0 45F0 B678            01678  1636 SUTAB4   BAL   R15,TABOFLO              HANDLE TABLE OVERFLOW            01585001
0011A4 45F0 B52C            0152C  1637          BAL   R15,MOVERRO                                                01586001
0011A8 47F0 B06C            0106C  1638          B     SUBFIN4                  NO OPT, MAKE LOOP ELEMENTARY     01587001
                                   1639 *                                                                         01588001
0011AC 90E2 C168            02168  1640 OUCHA    STM   R14,R2,REGSAVE           SAVE REGISTERS                   01589001
0011B0 47F0 B2D2            012D2  1641 LOUCHAF  B     LOUCHA7                  BRANCH ONLY IF FIRST RECORD      01590001
                                   1642 *                                                                         01591001
                                   1643          CHECK SWRITE                                                     01592001
0011B4 4110 B238            01238  1644+         LA    1,SWRITE                           LOAD PARAMETER REG 1    02-IHBIN
0011B8 58E0 1008            00008  1645+         L     14,8(0,1)                 PICK UP DCB ADDR                 01-CHECK
0011BC 58F0 E034            00034  1646+         L     15,52(0,14)               LOAD CHECK ROUTINE ADDR          01-CHECK
0011C0 05EF                        1647+         BALR  14,15                     LINK TO CHECK ROUTINE            01-CHECK
                                   1648 *                                                                         01593001
0011C2 D503 C020 C01C 02020 0201C  1649 LOUCHA6  CLC   ZARSPO(4),ZARNO          BUFFER EXCHANGE IN SUBSCR EXPR ? 01594001
0011C8 4770 B264            01264  1650          BNE   LOUCHA1                  YES                              01595001
0011CC 922F 4001      00001        1651 LOUCHA5  MVI   1(R4),XFZETA             ZETA TERMINATES O-BUFFER         01596001
0011D0 5840 BFD4            01FD4  1652          L     R4,ZOBWRITE                                                01597001
0011D4 1864                        1653          LR    R6,R4                                                      01598001
0011D6 0640                        1654          BCTR  R4,0                     INITIALIZE R4                    01599001
0011D8 5850 D0E0            000E0  1655 LOUCHA4  L     R5,SRCE3S                OUTPUT BUFFER LENGTH             01600001
0011DC 4B50 BF68            01F68  1656          SH    R5,KH12                  SET END PTRS                     01601001
0011E0 1A56                        1657          AR    R5,R6                                                      01602001
0011E2 5050 BFEC            01FEC  1658          ST    R5,ZFILE9                                                  01603001
0011E6 4150 5003            00003  1659          LA    R5,3(,R5)                                                  01604001
0011EA 5050 BFE8            01FE8  1660          ST    R5,ZFILE6                                                  01605001
0011EE 4150 5001            00001  1661          LA    R5,1(,R5)                                                  01606001
0011F2 5050 BFE4            01FE4  1662          ST    R5,ZFILE5                                                  01607001
0011F6 4150 5002            00002  1663          LA    R5,2(,R5)                                                  01608001
0011FA 5050 BFE0            01FE0  1664          ST    R5,ZFILE3                                                  01609001
0011FE 4150 5001            00001  1665          LA    R5,1(,R5)                                                  01610001
001202 5050 BFDC            01FDC  1666          ST    R5,ZFILE2                                                  01611001
001206 4150 5001            00001  1667          LA    R5,1(,R5)                                                  01612001
00120A 5050 BFD8            01FD8  1668          ST    R5,ZFILE1                                                  01613001
00120E D203 BFD4 BFD0 01FD4 01FD0  1669          MVC   ZOBWRITE(4),ZOBWORK      ZOBWRITE = ZOBWORK               01614001
001214 5060 BFD0            01FD0  1670          ST    R6,ZOBWORK               START ADDR OF NEW OUT BUFFER     01615001
001218 4850 BFF0            01FF0  1671          LH    R5,ZOUTCOT               OUTPUT RECORD COUNTER            01616001
00121C 4950 BF72            01F72  1672          CH    R5,KH255                 TOO MUCH SOURCE OUTPUT ?         01617001
001220 4780 B2DA            012DA  1673          BE    LOUCHA8                  YES                              01618001
001224 4150 5001            00001  1674          LA    R5,1(,R5)                                                  01619001
001228 4050 BFF0            01FF0  1675          STH   R5,ZOUTCOT                                                 01620001
00122C 5850 D068            00068  1676          L     R5,AUT2DCB               R5 -> SYSUT2 DCB                 01621001
001230 5860 BFD4            01FD4  1677          L     R6,ZOBWRITE              AREA ADDR                        01622001
                                   1678 *                                                                         01623001
                                   1679          WRITE SWRITE,SF,(R5),(R6)                                        01624001
001234                             1680+         CNOP  0,4                                                        02-IHBRD
001234 4510 B24C            0124C  1681+         BAL   1,*+24                    LOAD DECB ADDRESS                02-IHBRD
001238 00000000                    1682+SWRITE   DC    F'0'                               EVENT CONTROL BLOCK     02-IHBRD
00123C 00                          1683+         DC    X'00'                              TYPE FIELD              02-IHBRD
00123D 20                          1684+         DC    X'20'                              TYPE FIELD              02-IHBRD
00123E 0000                        1685+         DC    AL2(0)                             LENGTH                  02-IHBRD
001240 00000000                    1686+         DC    A(0)                               DCB ADDRESS             02-IHBRD
001244 00000000                    1687+         DC    A(0)                               AREA ADDRESS            02-IHBRD
001248 00000000                    1688+         DC    A(0)                               RECORD POINTER WORD     02-IHBRD
00124C 5051 0008            00008  1689+         ST    R5,8(1,0)                          STORE DCB ADDRESS       02-IHBRD
001250 5061 000C            0000C  1690+         ST    R6,12(1,0)                         STORE AREA ADDRESS      02-IHBRD
001254 58F1 0008            00008  1691+         L     15,8(1,0)             LOAD DCB ADDRESS                     02-IHBRD
001258 58F0 F030            00030  1692+         L     15,48(0,15)                        LOAD RDWR ROUTINE ADDR  02-IHBRD
00125C 05EF                        1693+         BALR  14,15                              LINK TO RDWR ROUTINE    02-IHBRD
                                   1694 *                                                                         01625001
00125E 98E2 C168            02168  1695          LM    R14,R2,REGSAVE           RESTORE REGS                     01626001
001262 07FF                        1696          BR    R15                                                        01627001
                                   1697 *                                                                         01628001
001264 5850 C068            02068  1698 LOUCHA1  L     R5,ZBRACK                GET CURRENT LEN OF SUBSCRIPT     01629001
001268 1864                        1699          LR    R6,R4                                                      01630001
00126A 1B65                        1700          SR    R6,R5                    SUBSCRIPT LENGTH                 01631001
00126C 4740 B1CC            011CC  1701          BM    LOUCHA5                  NOTHING TO SAVE                  01632001
001270 4960 BF6C            01F6C  1702          CH    R6,KH18                  SUBSCRIPT ALREADY TOO LONG ?     01633001
001274 4720 B2BC            012BC  1703          BH    LOUCHA2                  YES                              01634001
001278 4260 B285            01285  1704          STC   R6,LOUCHAM+1             LENGTH OF SUBSCRIPT              01635001
00127C 4260 B291            01291  1705          STC   R6,LOUCHAL+3                                               01636001
001280 5860 BFD4            01FD4  1706          L     R6,ZOBWRITE              START ADDR OF NEW OUT-BUFFER     01637001
001284 D200 6000 5000 00000 00000  1707 LOUCHAM  MVC   0(1,R6),0(R5)            SAVE SUBSCRIPT                   01638001
00128A 922F 5000      00000        1708          MVI   0(R5),XFZETA             REPLACE OPENING BRACKET BY ZETA  01639001
00128E 4140 6000            00000  1709 LOUCHAL  LA    R4,0(0,R6)               DISPLACEMENT LENGTH OF SUB       01640001
001292 5060 C068            02068  1710          ST    R6,ZBRACK                ADDR OF OPENING BRACKET          01641001
001296 9508 6000      00000        1711          CLI   0(R6),XFLSQBR            SUBSCRIPT OPERATOR OPEN BRAC ?   01642001
00129A 4770 B1D8            011D8  1712          BNE   LOUCHA4                  NO                               01643001
00129E 5850 C020            02020  1713          L     R5,ZARSPO                YES, UPDATE ARIDSTAB ENTRY       01644001
0012A2 4860 BFF0            01FF0  1714          LH    R6,ZOUTCOT               OUTPUT RECORD COUNTER            01645001
0012A6 4160 6001            00001  1715          LA    R6,1(,R6)                UPDATE                           01646001
0012AA 4260 5004            00004  1716          STC   R6,4(,R5)                STORE RECORD COUNTER             01647001
0012AE D201 5005 BF54 00005 01F54  1717          MVC   5(2,R5),ZERO             SET RELATIVE ADDR TO ZERO        01648001
0012B4 5860 BFD4            01FD4  1718          L     R6,ZOBWRITE              START ADDR OF NEW BUFFER         01649001
0012B8 47F0 B1D8            011D8  1719          B     LOUCHA4                                                    01650001
                                   1720 *                                                                         01651001
0012BC 45F0 AD9E            00D9E  1721 LOUCHA2  BAL   R15,SUCRIDEL                                               01652001
0012C0 92FF C0B0      020B0        1722          MVI   ZCLOBRA,X'FF'            ZCLOBRA IS SET TO X'FF'          01653001
0012C4 5850 BFD4            01FD4  1723          L     R5,ZOBWRITE              START ADDR OF NEW BUFFER         01654001
0012C8 0650                        1724          BCTR  R5,0                                                       01655001
0012CA 5050 C068            02068  1725          ST    R5,ZBRACK                                                  01656001
0012CE 47F0 B1CC            011CC  1726          B     LOUCHA5                  BRANCH TO LOUCHA5                01657001
                                   1727 *                                                                         01658001
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  Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

0012D2 9200 B1B1      011B1        1728 LOUCHA7  MVI   LOUCHAF+1,X'00'       TURN OFF SWITCH                 01659001
0012D6 47F0 B1C2            011C2  1729          B     LOUCHA6                                               01660001
                                   1730 *                                                                    01661001
0012DA D201 C014 BF8E 02014 01F8E  1731 LOUCHA8  MVC   ZERRONU,TOOLONG                                       01662001
0012E0 D203 C00C C010 0200C 02010  1732          MVC   ZBEGERR,ZENDERR                                       01663001
0012E6 45F0 B52C            0152C  1733          BAL   R15,MOVERRO                                           01664001
0012EA 47F0 A51A            0051A  1734          B     LOMEGA3                                               01665001
                                   1735 *                                                                    01666001
                                   1736 *        ICHA                                                        01667001
                                   1737 *                                                                    01668001
                                   1738 *        THE ROUTINE IS ENTERED WHEN OPERATOR ZETA (END OF INPUT     01669001
                                   1739 *        BUFFER) IS FOUND. IF NECESSARY A PART OF THE OLD BUFFER     01670001
                                   1740 *        IS SAVED IMMEDIATLY BEFORE THE NEW BUFFER. START            01671001
                                   1741 *        ADDR OF SAVED AREA IS STORED IN ZIBWORK                     01672001
                                   1742 *                                                                    01673001
                                   1743 *        RETURN VIA R15                                              01674001
                                   1744 *                                                                    01675001
0012EE 90E2 C168            02168  1745 ICHA     STM   R14,R2,REGSAVE        SAVE REGISTERS                  01676001
                                   1746 *                                                                    01677001
                                   1747          CHECK SREAD                 CHECK LAST READ                 01678001
0012F2 4110 B30C            0130C  1748+         LA    1,SREAD                         LOAD PARAMETER REG 1  02-IHBIN
0012F6 58E0 1008            00008  1749+         L     14,8(0,1)                  PICK UP DCB ADDR           01-CHECK
0012FA 58F0 E034            00034  1750+         L     15,52(0,14)                LOAD CHECK ROUTINE ADDR    01-CHECK
0012FE 05EF                        1751+         BALR  14,15                      LINK TO CHECK ROUTINE      01-CHECK
                                   1752 *                                                                    01679001
001300 5850 D064            00064  1753 ICHA1    L     R5,AUT1DCB            R5 -> SYSUT1 DCB                01680001
001304 5860 BFC8            01FC8  1754          L     R6,ZIBRUN             AREA ADDR                       01681001
                                   1755 *                                                                    01682001
                                   1756          READ  SREAD,SF,(R5),(R6)                                    01683001
001308                             1757+         CNOP  0,4                                                   02-IHBRD
001308 4510 B320            01320  1758+         BAL   1,*+24                     LOAD DECB ADDRESS          02-IHBRD
00130C 00000000                    1759+SREAD    DC    F'0'                            EVENT CONTROL BLOCK   02-IHBRD
001310 00                          1760+         DC    X'00'                           TYPE FIELD            02-IHBRD
001311 80                          1761+         DC    X'80'                           TYPE FIELD            02-IHBRD
001312 0000                        1762+         DC    AL2(0)                          LENGTH                02-IHBRD
001314 00000000                    1763+         DC    A(0)                            DCB ADDRESS           02-IHBRD
001318 00000000                    1764+         DC    A(0)                            AREA ADDRESS          02-IHBRD
00131C 00000000                    1765+         DC    A(0)                            RECORD POINTER WORD   02-IHBRD
001320 5051 0008            00008  1766+         ST    R5,8(1,0)                       STORE DCB ADDRESS     02-IHBRD
001324 5061 000C            0000C  1767+         ST    R6,12(1,0)                      STORE AREA ADDRESS    02-IHBRD
001328 58F1 0008            00008  1768+         L     15,8(1,0)             LOAD DCB ADDRESS                02-IHBRD
00132C 58F0 F030            00030  1769+         L     15,48(0,15)                     LOAD RDWR ROUTINE ADDR 02-IHBRD
001330 05EF                        1770+         BALR  14,15                           LINK TO RDWR ROUTINE  02-IHBRD
                                   1771 *                                                                    01684001
001332 98E2 C168            02168  1772          LM    R14,R2,REGSAVE        RESTORE REGISTERS               01685001
001336 5830 BFCC            01FCC  1773          L     R3,ZIBREAD            BEGIN OF ACTIVITED BUFFER       01686001
00133A D203 BFCC BFC8 01FCC 01FC8  1774          MVC   ZIBREAD(4),ZIBRUN     EXCHANGE POINTERS               01687001
001340 5030 BFC8            01FC8  1775          ST    R3,ZIBRUN                                             01688001
001344 07FF                        1776          BR    R15                                                   01689001
                                   1777 *                                                                    01690001
001346 90E2 C168            02168  1778 ICHAI    STM   R14,R2,REGSAVE                                        01691001
00134A 47F0 B300            01300  1779          B     ICHA1                                                 01692001
                                   1780 *                                                                    01693001
                                   1781 *        ITABMOVE                                                    01694001
                                   1782 *                                                                    01695001
                                   1783 *        ITABMOVE IS ENTERED AT THE BEGINNING OF A NEW PROGRAM       01696001
                                   1784 *        BLOCK AND DURING INITIALIZATION. THE READ OF NEXT ITAB-     01697001
                                   1785 *        RECORD IS ALREADY INITIALIZED. IF A MOVE OF NEXT RECORD     01698001
                                   1786 *        IS NECESSARY IT IS DONE BY THE SUBROUTINE ITABM. ALL        01699001
                                   1787 *        CURRENT ITAB-POINTERS IS UPDATED                            01700001
                                   1788 *                                                                    01701001
                                   1789 *        RETURN VIA R15                                              01702001
                                   1790 *        WORKREG R7, R8                                              01703001
                                   1791 *        SUBROUTINE ITABM, MOVERRO                                   01704001
                                   1792 *                                                                    01705001
00134E 9200 A7DB      007DB        1793 ITABMOP  MVI   LETTER+1,X'00'        TURN OFF PROCEDURE SWITCH       01706001
001352 90E2 C168            02168  1794 ITABMOVE STM   R14,R2,REGSAVE                                        01707001
001356 9580 C0B5      020B5        1795          CLI   IOBYTE,READM          INITIALIZED READ OPERATION ?    01708001
00135A 4770 B370            01370  1796          BNE   ITAB4                 NO                              01709001
                                   1797 *                                                                    01710001
                                   1798          CHECK RITAB                 YES, CHECK                      01711001
00135E 4110 B470            01470  1799+         LA    1,RITAB                         LOAD PARAMETER REG 1  02-IHBIN
001362 58E0 1008            00008  1800+         L     14,8(0,1)                  PICK UP DCB ADDR           01-CHECK
001366 58F0 E034            00034  1801+         L     15,52(0,14)                LOAD CHECK ROUTINE ADDR    01-CHECK
00136A 05EF                        1802+         BALR  14,15                      LINK TO CHECK ROUTINE      01-CHECK
                                   1803 *                                                                    01712001
00136C 9220 C0B5      020B5        1804          MVI   IOBYTE,READC          SET READ CHECK MASK             01713001
001370 5870 C000            02000  1805 ITAB4    L     R7,ZITREC             ADDR OF BLOCKBEGIN              01714001
001374 D201 7006 C008 00006 02008  1806          MVC   6(2,R7),ZCURITLE      ITAB REC LENGTH OF EMBR BLOCK   01715001
00137A D201 C008 7000 02008 00000  1807          MVC   ZCURITLE(2),0(R7)     LENGTH OF BLOCK                 01716001
001380 5880 BFFC            01FFC  1808          L     R8,ZCURITEN           A MOVE IS NECESSARY ?           01717001
001384 4180 800B            0000B  1809          LA    R8,11(,R8)                                            01718001
001388 1987                        1810          CR    R8,R7                                                 01719001
00138A 4780 B3F6            013F6  1811          BE    ITAB1                 NO, MOVE                        01720001
                                   1812 *                                                                    01721001
                                   1813 *        MOVE ITAB RECORD                                            01722001
                                   1814 *                                                                    01723001
00138E 4860 C008            02008  1815          LH    R6,ZCURITLE           LENGTH OF ITAB RECORD           01724001
001392 4460 B4C8            014C8  1816          EX    R6,ITABMEX            MOVE FIRST PART                 01725001
001396 1856                        1817          LR    R5,R6                                                 01726001
001398 1A75                        1818          AR    R7,R5                 END ADDR OF MOVED RECORD        01727001
00139A 1A58                        1819          AR    R5,R8                 END ADDR OR UNMOVED RECORD      01728001
00139C 4B70 BF74            01F74  1820          SH    R7,KH1792             PREPARE MOVE                    01729001
0013A0 4B50 BF74            01F74  1821          SH    R5,KH1792             PREPARE MOVE                    01730001
0013A4 8A60 0008            00008  1822          SRA   R6,8                  PREPARE BRANCH                  01731001
0013A8 8B60 0002            00002  1823          SLA   R6,2                                                  01732001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0013AC 47F6 B3B0              013B0  1824          B     *+4(R6)                                          01733001
                                     1825 *                                                               01734001
0013B0 47F0 B3F6              013F6  1826          B     ITABM8                  +00                      01735001
0013B4 47F0 B3F0              013F0  1827          B     ITABM7                  +04                      01736001
0013B8 47F0 B3EA              013EA  1828          B     ITABM6                  +08                      01737001
0013BC 47F0 B3E4              013E4  1829          B     ITABM5                  +12                      01738001
0013C0 47F0 B3DE              013DE  1830          B     ITABM4                  +16                      01739001
0013C4 47F0 B3D8              013D8  1831          B     ITABM3                  +20                      01740001
0013C8 47F0 B3D2              013D2  1832          B     ITABM2                  +24                      01741001
0013CC D2FF 5000 7000 00000 00000  1833          MVC   0(256,R5),0(R7)         +28                      01742001
                                     1834 *                                                               01743001
0013D2 D2FF 5100 7100 00100 00100  1835 ITABM2   MVC   256(256,R5),256(R7)                              01744001
0013D8 D2FF 5200 7200 00200 00200  1836 ITABM3   MVC   512(256,R5),512(R7)                              01745001
0013DE D2FF 5300 7300 00300 00300  1837 ITABM4   MVC   768(256,R5),768(R7)                              01746001
0013E4 D2FF 5400 7400 00400 00400  1838 ITABM5   MVC   1024(256,R5),1024(R7)                            01747001
0013EA D2FF 5500 7500 00500 00500  1839 ITABM6   MVC   1280(256,R5),1280(R7)                            01748001
0013F0 D2FF 5600 7600 00600 00600  1840 ITABM7   MVC   1536(256,R5),1536(R7)                            01749001
                        013F6        1841 ITABM8   EQU   *                                                01750001
                                     1842 *                                                               01751001
0013F6 4850 C008              02008  1843 ITAB1    LH    R5,ZCURITLE             GET ADDR OF LAST ITAB ENTRY   01752001
0013FA 5A50 BFFC              01FFC  1844          A     R5,ZCURITEN             ACTUAL RECORD LENGTH + PREV ADD 01753001
0013FE 5050 BFFC              01FFC  1845          ST    R5,ZCURITEN                                      01754001
001402 4150 500B              0000B  1846          LA    R5,11(,R5)              ADDR OF FIRST FREE BYTE    01755001
001406 5050 C000              02000  1847          ST    R5,ZITREC                                        01756001
00140A D500 800A D09F 0000A 0009F  1848          CLC   10(1,R8),PBN+1          LAST ITAB RECORD ?         01757001
001410 4780 B49A              0149A  1849          BE    ITAB7                   YES                        01758001
001414 D201 C182 8002 02182 00002  1850          MVC   ALIGNH(2),2(R8)         LENGTH OF NEXT BLOCK       01759001
00141A 5A50 C180              02180  1851          A     R5,ALIGN                END ADDR OF NEXT BLOCK     01760001
00141E 5950 C004              02004  1852          C     R5,ZITEND               ITAB OVERFLOW ?            01761001
001422 4720 B4A6              014A6  1853          BH    ITAB10                  YES                        01762001
001426 9520 C0B5        020B5        1854          CLI   IOBYTE,READC            WHICH I/O STATUS ?         01763001
00142A 4780 B462              01462  1855          BE    ITAB6                   CHECKED READ OPERATION     01764001
00142E 4740 B440              01440  1856          BL    ITAB5                   CHECKED WRITE OPERATION    01765001
                                     1857 *                                                               01766001
                                     1858          CHECK TWRITE                  INITIALIZED WRITE OPERATION 01767001
001432 4110 B644              01644  1859+         LA    1,TWRITE                          LOAD PARAMETER REG 1  02-IHBIN
001436 58E0 1008              00008  1860+         L     14,8(0,1)                PICK UP DCB ADDR          01-CHECK
00143A 58F0 E034              00034  1861+         L     15,52(0,14)              LOAD CHECK ROUTINE ADDR   01-CHECK
00143E 05EF                          1862+         BALR  14,15                    LINK TO CHECK ROUTINE     01-CHECK
                                     1863 *                                                               01768001
                        01440        1864 ITAB5    EQU   *                                                01769001
001440 5810 D06C              0006C  1865          L     R1,AUT3DCB              R1 -> SYSUT3 DCB           01770001
                                     1866 *                                                               01771001
                                     1867          NOTE  (1)                     SAVE ID OF LAST BLOCK      01772001
001444 58F0 1054              00054  1868+         L     15,84(0,1)                        LOAD NOTE  RTN ADDRESS 01-NOTE
001448 05EF                          1869+         BALR  14,15                             LINK TO NOTE  ROUTINE  01-NOTE
                                     1870 *                                                               01773001
00144A 5010 C0B8              020B8  1871          ST    R1,NOTEW                                         01774001
00144E 5810 D06C              0006C  1872          L     R1,AUT3DCB              R1 -> SYSUT3 DCB           01775001
001452 9201 C0BF        020BF        1873          MVI   NOTER+3,X'01'           ADDR NEXT ITAB BLOCK       01776001
                                     1874 *                                                               01777001
                                     1875          POINT (1),NOTER                                        01778001
001456 4100 C0BC              020BC  1876+         LA    0,NOTER                           LOAD PARAMETER REG 0  02-IHBIN
00145A 58F0 1054              00054  1877+         L     15,84(0,1)               LOAD POINT RTN ADDR       01-POINT
00145E 45EF 0004              00004  1878+         BAL   14,4(15,0)               LINK TO POINT ROUTINE     01-POINT
                                     1879 *                                                               01779001
001462 5850 D06C              0006C  1880 ITAB6    L     R5,AUT3DCB              R5 -> SYSUT3 DCB           01780001
001466 5860 C000              02000  1881          L     R6,ZITREC               READ START ADDR            01781001
                                     1882 *                                                               01782001
                                     1883          READ  RITAB,SF,(R5),(R6),'S'                           01783001
00146A 0700                          1884+         CNOP  0,4                                              02-IHBRD
00146C 4510 B484              01484  1885+         BAL   1,*+24                   LOAD DECB ADDRESS         02-IHBRD
001470 00000000                      1886+RITAB    DC    F'0'                              EVENT CONTROL BLOCK   02-IHBRD
001474 80                            1887+         DC    X'80'                             TYPE FIELD            02-IHBRD
001475 80                            1888+         DC    X'80'                             TYPE FIELD            02-IHBRD
001476 0000                          1889+         DC    AL2(0)                            LENGTH                02-IHBRD
001478 00000000                      1890+         DC    A(0)                              DCB ADDRESS           02-IHBRD
00147C 00000000                      1891+         DC    A(0)                              AREA ADDRESS          02-IHBRD
001480 00000000                      1892+         DC    A(0)                              RECORD POINTER WORD   02-IHBRD
001484 5051 0008              00008  1893+         ST    R5,8(1,0)                         STORE DCB ADDRESS     02-IHBRD
001488 5061 000C              0000C  1894+         ST    R6,12(1,0)                        STORE AREA ADDRESS    02-IHBRD
00148C 58F1 0008              00008  1895+         L     15,8(1,0)               LOAD DCB ADDRESS           02-IHBRD
001490 58F0 F030              00030  1896+         L     15,48(0,15)                       LOAD RDWR ROUTINE ADDR 02-IHBRD
001494 05EF                          1897+         BALR  14,15                             LINK TO RDWR ROUTINE  02-IHBRD
                                     1898 *                                                               01784001
001496 9280 C0B5        020B5        1899          MVI   IOBYTE,READM            SET ITAB READ              01785001
00149A 98E2 C168              02168  1900 ITAB7    LM    R14,R2,REGSAVE          RESTORE REGS               01786001
00149E D200 C0AF 800A 020AF 0000A  1901          MVC   CURPBN(1),10(R8)        SAVE CURRENT PBN           01787001
0014A4 07FF                          1902          BR    R15                     RETURN                     01788001
                                     1903 *                                                               01789001
0014A6 5030 C00C              0200C  1904 ITAB10   ST    R3,ZBEGERR              ERROR EDIT                 01790001
0014AA 5030 C010              02010  1905          ST    R3,ZENDERR                                       01791001
0014AE D201 C014 BF8C 02014 01F8C  1906          MVC   ZERRONU,ITABOVER                                 01792001
0014B4 45F0 B52C              0152C  1907          BAL   R15,MOVERRO                                      01793001
0014B8 47F0 A51A              0051A  1908          B     LOMEGA3                                          01794001
                                     1909 *                                                               01795001
0014BC 90E2 C168              02168  1910 ITABREAD STM   R14,R2,REGSAVE                                   01796001
0014C0 4180 C278              02278  1911          LA    R8,GENER                 ADDR DUMMY HEADER         01797001
0014C4 47F0 B462              01462  1912          B     ITAB6                                            01798001
                                     1913 *                                                               01799001
0014C8 D200 8000 7000 00000 00000  1914 ITABMEX  MVC   0(1,R8),0(R7)                                    01800001
                                     1915 *                                                               01801001
                                     1916 *        INVALID OPERAND FOUND                                  01802001
                                     1917 *                                                               01803001
                                     1918 *        SET SYNTAX CHECK MODE AND GIVE ERROR MESSAGE           01804001
                                     1919 *                                                               01805001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

0014CE 9680 D080      00080        1920 INCOROP  OI    COMPFLGS,COMPMODE       SET SYNTAX CHECK MODE            01806001
0014D2 4100 C08D            0208D  1921          LA    R0,ZIDEX+12                                              01807001
0014D6 1893                        1922 INCOROP5 LR    R9,R3                                                    01808001
0014D8 952E 3000      00000        1923 INCOROP1 CLI   0(R3),X'2E'             END OF OPERAND ?                 01809001
0014DC 4740 B502            01502  1924          BL    INCOROP2                YES                              01810001
0014E0 4780 B51E            0151E  1925          BE    INCOROP3                STRING OR LOGICAL VALUE          01811001
0014E4 952F 3000      00000        1926          CLI   0(R3),XFZETA            END OF INPUT BUFFER ?            01812001
0014E8 4780 B4F4            014F4  1927          BE    INCOROP4                YES                              01813001
0014EC 4130 3001            00001  1928          LA    R3,1(,R3)               PROCEED SCAN FOR OPERAND END     01814001
0014F0 47F0 B4D8            014D8  1929          B     INCOROP1                                                 01815001
                                   1930 *                                                                       01816001
0014F4 1813                        1931 INCOROP4 LR    R1,R3                                                    01817001
0014F6 45F0 B5B0            015B0  1932          BAL   R15,MOVE                                                 01818001
0014FA 45F0 B2EE            012EE  1933          BAL   R15,ICHA                                                 01819001
0014FE 47F0 B4D6            014D6  1934          B     INCOROP5                                                 01820001
                                   1935 *                                                                       01821001
001502 1813                        1936 INCOROP2 LR    R1,R3                                                    01822001
001504 45F0 B5B0            015B0  1937          BAL   R15,MOVE                                                 01823001
001508 5080 C010            02010  1938          ST    R8,ZENDERR                                               01824001
00150C D203 C00C C0A8 0200C 020A8  1939          MVC   ZBEGERR,OPSTART                                          01825001
001512 45F0 B52C            0152C  1940          BAL   R15,MOVERRO                                              01826001
001516 4170 C076            02076  1941          LA    R7,ZALLPU               REPLACE INCOR ID  BY ALL PUB ID  01827001
00151A 47F0 A80C            0080C  1942          B     LETTER1                                                  01828001
                                   1943 *                                                                       01829001
00151E D205 3000 C076 00000 02076  1944 INCOROP3 MVC   0(6,R3),ZPOINT          REPLACE INT NAME BY SIX PERIODS  01830001
001524 4130 3006            00006  1945          LA    R3,6(,R3)                                                01831001
001528 47F0 B4D8            014D8  1946          B     INCOROP1                                                 01832001
                                   1947 *                                                                       01833001
                                   1948 *        MOVERRO                                                        01834001
                                   1949 *                                                                       01835001
                                   1950 *        ERROR EDITING ROUTINE                                          01836001
                                   1951 *                                                                       01837001
                                   1952 *        OUTPUTS ALWAYS FIXED PART CONTAINING LENGTH OF ENTRY,          01838001
                                   1953 *        ERROR NUMBER AND SEMICOLON COUNTER. SOMETMES VARIABLE          01839001
                                   1954 *        PART WHOSE START ADDR IS STORED IN ZBEGERR AND (END            01840001
                                   1955 *        ADDR + 1) IN ZENDERR                                           01841001
                                   1956 *                                                                       01842001
                                   1957 *        RETURN VIA R15                                                 01843001
                                   1958 *                                                                       01844001
00152C 5850 D0C0            000C0  1959 MOVERRO  L     R5,NEXTERR                                               01845001
001530 5950 D0C4            000C4  1960          C     R5,ENDPOOL              ERROR POOL OVERFLOW ?            01846001
001534 4720 B580            01580  1961          BH    MOVERRO2                YES                              01847001
001538 5860 C010            02010  1962          L     R6,ZENDERR              GET LENGTH OF VARIABLE PART      01848001
00153C 5B60 C00C            0200C  1963          S     R6,ZBEGERR                                               01849001
001540 4960 BF68            01F68  1964          CH    R6,KH12                 LENGTH EXCEEDS MAXIMUM ?         01850001
001544 47D0 B54C            0154C  1965          BNH   MOVERRO1                NO                               01851001
001548 4860 BF68            01F68  1966          LH    R6,KH12                 YES, SET LENGTH TO MAX           01852001
00154C 4160 6004            00004  1967 MOVERRO1 LA    R6,4(,R6)               LENGTH OF FULL ERROR ENTRY       01853001
001550 1A56                        1968          AR    R5,R6                   GET ADDR OF NEXT ERROR ENTRY     01854001
001552 5050 D0C0            000C0  1969          ST    R5,NEXTERR                                               01855001
001556 1B56                        1970          SR    R5,R6                                                    01856001
001558 4260 5000            00000  1971          STC   R6,0(,R5)               FIXED PART OF ERROR ENTRY, LEN   01857001
00155C D200 5001 C015 00001 02015  1972          MVC   1(1,R5),ZERRONU+1       ERROR NUMBER                     01858001
001562 D201 5002 D09C 00002 0009C  1973          MVC   2(2,R5),SEMCNT          SEMICOLON COUNTER                01859001
001568 4B60 BF5C            01F5C  1974          SH    R6,KH5                  ANY VARIABLE PART ?              01860001
00156C 4740 B57E            0157E  1975          BM    MOVERRO3                NO                               01861001
001570 4260 B579            01579  1976          STC   R6,MOVERROM+1           LENGTH OF MOVE                   01862001
001574 5860 C00C            0200C  1977          L     R6,ZBEGERR              START ADDR OF ADDITIONAL PART    01863001
001578 D200 5004 6000 00004 00000  1978 MOVERROM MVC   4(1,R5),0(R6)           MOVE ADDITIONAL PART             01864001
00157E 07FF                        1979 MOVERRO3 BR    R15                                                      01865001
                                   1980 *                                                                       01866001
001580 9204 5000      00000        1981 MOVERRO2 MVI   0(R5),X'04'             TERMINATING ERROR ENTRY          01867001
001584 92D4 5001      00001        1982          MVI   1(R5),TOOMANY                                            01868001
001588 D201 5002 D09C 00002 0009C  1983          MVC   2(2,R5),SEMCNT                                           01869001
00158E 4150 5004            00004  1984          LA    R5,4(,R5)                                                01870001
001592 5050 D0C0            000C0  1985          ST    R5,NEXTERR                                               01871001
001596 47F0 A51A            0051A  1986          B     LOMEGA3                                                  01872001
                                   1987 *                                                                       01873001
00159A 1853                        1988 MOVEP    LR    R5,R3                   FIELD OF ONE BYTE                01874001
00159C 1B59                        1989          SR    R5,R9                                                    01875001
00159E 4770 B5B0            015B0  1990          BNZ   MOVE                                                     01876001
0015A2 1277                        1991          LTR   R7,R7                   POINT FOLLOWED BY ZERO ?         01877001
0015A4 074F                        1992          BMR   R15                     YES, NO SYNTAX ERROR             01878001
0015A6 4157 C082            02082  1993          LA    R5,NUMBER(R7)           ADDR IMPLIED POINT               01879001
0015AA 1958                        1994          CR    R5,R8                   POINT TERMINATE NUMBER           01880001
0015AC 4780 B708            01708  1995          BE    QTORLT1                 YES                              01881001
                                   1996 *                                                                       01882001
0015B0 1B19                        1997 MOVE     SR    R1,R9                   LENGTH OF MOVE                   01883001
0015B2 1858                        1998          LR    R5,R8                   CALCULATE END ADDR               01884001
0015B4 1A51                        1999          AR    R5,R1                                                    01885001
0015B6 1950                        2000          CR    R5,R0                   FULL MOVE POSSIBLE ?             01886001
0015B8 4720 B5C4            015C4  2001          BH    MOVE1                   NO                               01887001
0015BC 4410 B5D0            015D0  2002          EX    R1,MOVEEX               MOVE                             01888001
0015C0 1885                        2003          LR    R8,R5                   STEP PTR                         01889001
0015C2 07FF                        2004          BR    R15                     RETURN                           01890001
                                   2005 *                                                                       01891001
0015C4 1850                        2006 MOVE1    LR    R5,R0                   CALCULATE LEN OF POSSIBLE MOVE   01892001
0015C6 1B58                        2007          SR    R5,R8                                                    01893001
0015C8 4450 B5D0            015D0  2008          EX    R5,MOVEEX                                                01894001
0015CC 1880                        2009          LR    R8,R0                                                    01895001
0015CE 07FF                        2010          BR    R15                     RETURN                           01896001
                                   2011 *                                                                       01897001
0015D0 D200 8000 9000 00000 00000  2012 MOVEEX   MVC   0(0,R8),0(R9)                                            01898001
                                   2013 *                                                                       01899001
0015D6 9540 C0B5      020B5        2014 CHECK    CLI   IOBYTE,WRITEM           INITIALIZED WRITE OPERATION      01900001
0015DA 0775                        2015          BNER  R5                      NO, RETURN                       01901001
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  Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

0015DC 90E2 C168              02168  2016          STM    R14,R2,REGSAVE             SAVE REGS                       01902001
                                     2017 *                                                                          01903001
                                     2018          CHECK  TWRITE                     CHECK LAST WRITE                01904001
0015E0 4110 B644              01644  2019+         LA     1,TWRITE                             LOAD PARAMETER REG 1  02-IHBIN
0015E4 58E0 1008              00008  2020+         L      14,8(0,1)                   PICK UP DCB ADDR               01-CHECK
0015E8 58F0 E034              00034  2021+         L      15,52(0,14)                 LOAD CHECK ROUTINE ADDR        01-CHECK
0015EC 05EF                          2022+         BALR   14,15                       LINK TO CHECK ROUTINE          01-CHECK
                                     2023 *                                                                          01905001
0015EE 9210 C0B5        020B5        2024          MVI    IOBYTE,WRITEC              SET WRITE CHECK MASK            01906001
0015F2 98E2 C168              02168  2025          LM     R14,R2,REGSAVE             RESTORE REGS                    01907001
0015F6 07F5                          2026          BR     R5                                                         01908001
                                     2027 *                                                                          01909001
0015F8 90E2 C168              02168  2028 WRITE    STM    R14,R2,REGSAVE                                             01910001
0015FC 9520 C0B5        020B5        2029          CLI    IOBYTE,READC               WHICH I/O STATUS ?              01911001
001600 4740 B638              01638  2030          BL     WRITE2                     CHECKED WRITE OPERATION         01912001
001604 4780 B616              01616  2031          BE     WRITE1                     CHECKED READ OPERATION          01913001
                                     2032 *                                                                          01914001
                                     2033          CHECK  RITAB                      INITIALIZED READ OPERATION      01915001
001608 4110 B470              01470  2034+         LA     1,RITAB                              LOAD PARAMETER REG 1  02-IHBIN
00160C 58E0 1008              00008  2035+         L      14,8(0,1)                   PICK UP DCB ADDR               01-CHECK
001610 58F0 E034              00034  2036+         L      15,52(0,14)                 LOAD CHECK ROUTINE ADDR        01-CHECK
001614 05EF                          2037+         BALR   14,15                       LINK TO CHECK ROUTINE          01-CHECK
                                     2038 *                                                                          01916001
001616 5810 D06C              0006C  2039 WRITE1   L      R1,AUT3DCB                 R1 -> SYSUT3 DCB                01917001
                                     2040 *                                                                          01918001
                                     2041          NOTE   (1)                        SAVE ID OF LAST BLOCK           01919001
00161A 58F0 1054              00054  2042+         L      15,84(0,1)                           LOAD NOTE  RTN ADDRESS 01-NOTE
00161E 05EF                          2043+         BALR   14,15                                LINK TO NOTE  ROUTINE  01-NOTE
                                     2044 *                                                                          01920001
001620 5010 C0BC              020BC  2045          ST     R1,NOTER                                                   01921001
001624 5810 D06C              0006C  2046          L      R1,AUT3DCB                 R1 -> SYSUT3 DCB                01922001
001628 9201 C0BB        020BB        2047          MVI    NOTEW+3,X'01'              ADDR NEXT OUTPUT BLOCK          01923001
                                     2048 *                                                                          01924001
                                     2049          POINT  (1),NOTEW                                                  01925001
00162C 4100 C0B8              020B8  2050+         LA     0,NOTEW                              LOAD PARAMETER REG 0  02-IHBIN
001630 58F0 1054              00054  2051+         L      15,84(0,1)                  LOAD POINT RTN ADDR            01-POINT
001634 45EF 0004              00004  2052+         BAL    14,4(15,0)                  LINK TO POINT ROUTINE          01-POINT
                                     2053 *                                                                          01926001
                        01638        2054 WRITE2   EQU    *                                                          01927001
001638 5800 D06C              0006C  2055          L      R0,AUT3DCB                 R0 -> SYSUT3 DCB                01928001
00163C 4160 6004              00004  2056          LA     R6,4(,R6)                  ADD KEY LENGTH                  01929001
                                     2057 *                                                                          01930001
                                     2058          WRITE  TWRITE,SF,(R0),(R5),(R6)                                   01931001
001640                               2059+         CNOP   0,4                                                        02-IHBRD
001640 4510 B658              01658  2060+         BAL    1,*+24                      LOAD DECB ADDRESS              02-IHBRD
001644 00000000                      2061+TWRITE   DC     F'0'                                 EVENT CONTROL BLOCK   02-IHBRD
001648 00                            2062+         DC     X'00'                                TYPE FIELD            02-IHBRD
001649 20                            2063+         DC     X'20'                                TYPE FIELD            02-IHBRD
00164A 0000                          2064+         DC     AL2(0)                               LENGTH                02-IHBRD
00164C 00000000                      2065+         DC     A(0)                                 DCB ADDRESS           02-IHBRD
001650 00000000                      2066+         DC     A(0)                                 AREA ADDRESS          02-IHBRD
001654 00000000                      2067+         DC     A(0)                                 RECORD POINTER WORD   02-IHBRD
001658 5001 0008              00008  2068+         ST     R0,8(1,0)                            STORE DCB ADDRESS     02-IHBRD
00165C 5051 000C              0000C  2069+         ST     R5,12(1,0)                           STORE AREA ADDRESS    02-IHBRD
001660 4061 0006              00006  2070+         STH    R6,6(1,0)                  STORE LENGTH                    02-IHBRD
001664 58F1 0008              00008  2071+         L      15,8(1,0)                  LOAD DCB ADDRESS                02-IHBRD
001668 58F0 F030              00030  2072+         L      15,48(0,15)                          LOAD RDWR ROUTINE ADDR 02-IHBRD
00166C 05EF                          2073+         BALR   14,15                                LINK TO RDWR ROUTINE  02-IHBRD
                                     2074 *                                                                          01932001
00166E 9240 C0B5        020B5        2075          MVI    IOBYTE,WRITEM              SET WRITE MASK                  01933001
001672 98E2 C168              02168  2076          LM     R14,R2,REGSAVE                                             01934001
001676 07FF                          2077          BR     R15                                                        01935001
                                     2078 *                                                                          01936001
001678 5850 C0C0              020C0  2079 TABOFLO  L      R5,PFA                     ADDR OF LAST CRIDTAB ENTRY      01937001
00167C 1B66                          2080 TABOFLO1 SR     R6,R6                                                      01938001
00167E 4360 5000              00000  2081          IC     R6,0(,R5)                  FOR STATEMENT NUMBER            01939001
001682 4166 D478              00478  2082          LA     R6,FSTAB(R6)               ADDR FOR STATEMENT ENTRY        01940001
001686 9640 6000        00000        2083          OI     0(R6),NOSUOP                                               01941001
00168A 4B50 BF62              01F62  2084          SH     R5,KH9                                                     01942001
00168E 5950 C0C4              020C4  2085          C      R5,PFANO                   END OF CRIDTAB ?                01943001
001692 47D0 B67C              0167C  2086          BNH    TABOFLO1                   NO                              01944001
001696 92FF C0B2        020B2        2087          MVI    ZLVOV,X'FF'                SET ERROR SWITCH                01945001
00169A D203 C020 C01C 02020 0201C    2088          MVC    ZARSPO(4),ZARNO            SKIP ALL ARIDSTAB ENTRIES       01946001
0016A0 5030 C00C              0200C  2089          ST     R3,ZBEGERR                 ERROR EDITING                   01947001
0016A4 5030 C010              02010  2090          ST     R3,ZENDERR                                                 01948001
0016A8 D201 C014 BF86 02014 01F86    2091          MVC    ZERRONU,TABOVER                                            01949001
0016AE 07FF                          2092          BR     R15                                                        01950001
                                     2093 *                                                                          01951001
0016B0 4180 C082              02082  2094 DIGIT19  LA     R8,NUMBER                                                  01952001
0016B4 4100 C095              02095  2095          LA     R0,NUMBER+19               MAX LENGTH OF CONSTANT + 1      01953001
0016B8 1B77                          2096          SR     R7,R7                                                      01954001
0016BA 1893                          2097          LR     R9,R3                      SET FIELD START                 01955001
0016BC 9200 C138        02138        2098          MVI    SCATEST,0                                                  01956001
0016C0 4110 3001              00001  2099 DIG191   LA     R1,1(,R3)                  TRT START                       01957001
0016C4 1B22                          2100 DIG192   SR     R2,R2                                                      01958001
0016C6 DDFF 1000 C334 00000 02334    2101 DIG193   TRT    0(256,R1),DIG19                                            01959001
0016CC 4780 B74C              0174C  2102          BZ     DIGL19                     MORE THAN 256 BYTES             01960001
0016D0 1831                          2103          LR     R3,R1                      UPDATE R3                       01961001
0016D2 47F2 B6D2              016D2  2104          B      *(R2)                      BRANCH TABLE                    01962001
0016D6 47F0 B6EE              016EE  2105          B      DECPTM                     +04                             01963001
0016DA 47F0 B6F8              016F8  2106          B      SCAFACTM                   +08                             01964001
0016DE 47F0 B702              01702  2107          B      QTORLT                     +12                             01965001
0016E2 47F0 B71A              0171A  2108          B      ZETAM                      +16                             01966001
0016E6 47F0 A842              00842  2109          B      RHO                        +20                             01967001
0016EA 47F0 B72C              0172C  2110          B      OTHER                      +24                             01968001
                                     2111 *                                                                          01969001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

0016EE 45F0 B5B0            015B0  2112 DECPTM   BAL   R15,MOVE                                               01970001
0016F2 1A71                        2113          AR    R7,R1                  EXPONENT CORRECTION             01971001
0016F4 47F0 B7DE            017DE  2114          B     DECPOIN1                                               01972001
                                   2115 *                                                                     01973001
0016F8 45F0 B5B0            015B0  2116 SCAFACTM BAL   R15,MOVE                                               01974001
0016FC 1A71                        2117          AR    R7,R1                  EXPONENT CORRECTION             01975001
0016FE 47F0 B876            01876  2118          B     SCA1                                                   01976001
                                   2119 *                                                                     01977001
001702 45F0 B5B0            015B0  2120 QTORLT   BAL   R15,MOVE                                               01978001
001706 1A71                        2121          AR    R7,R1                  NUMBER OF INTEGERS              01979001
001708 5070 C154            02154  2122 QTORLT1  ST    R7,ZEXCORR                                             01980001
00170C 4520 B96C            0196C  2123          BAL   R2,CERR                REBUILD CONSTANT                01981001
001710 D201 C014 BF78 02014 01F78  2124          MVC   ZERRONU,INVOP                                          01982001
001716 47F0 B4CE            014CE  2125          B     INCOROP                                                01983001
                                   2126 *                                                                     01984001
00171A 45F0 B5B0            015B0  2127 ZETAM    BAL   R15,MOVE                                               01985001
00171E 1A71                        2128          AR    R7,R1                  EXPONENT CORRECTION             01986001
001720 45F0 B2EE            012EE  2129          BAL   R15,ICHA                                               01987001
001724 1813                        2130          LR    R1,R3                                                  01988001
001726 1893                        2131          LR    R9,R3                                                  01989001
001728 47F0 B6C4            016C4  2132          B     DIG192                                                 01990001
                                   2133 *                                                                     01991001
00172C 5980 C120            02120  2134 OTHER    C     R8,NSTART              BUFFER EXCHANGE WITHIN INTEGER ? 01992001
001730 4770 B73C            0173C  2135          BNE   OTHER1                 YES                             01993001
001734 1873                        2136          LR    R7,R3                  COMPUTE NUMBER OF DIGITS        01994001
001736 1B79                        2137          SR    R7,R9                                                  01995001
001738 47F0 B9F8            019F8  2138          B     INTCON                                                 01996001
                                   2139 *                                                                     01997001
00173C 45F0 B5B0            015B0  2140 OTHER1   BAL   R15,MOVE                                               01998001
001740 1A71                        2141          AR    R7,R1                  GET NUMBER OF DIGITS            01999001
001742 1818                        2142          LR    R1,R8                  ADJUST POINTERS                 02000001
001744 4190 C082            02082  2143          LA    R9,NUMBER                                              02001001
001748 47F0 B9F8            019F8  2144          B     INTCON                                                 02002001
                                   2145 *                                                                     02003001
00174C 4110 1100            00100  2146 DIGL19   LA    R1,256(,R1)            UPDATE INPUT PTR                02004001
001750 47F0 B6C6            016C6  2147          B     DIG193                                                 02005001
                                   2148 *                                                                     02006001
001754 4180 C082            02082  2149 DIGIT0   LA    R8,NUMBER                                              02007001
001758 4100 C095            02095  2150          LA    R0,NUMBER+19           MAX LENGTH OF CONSTANT + 1      02008001
00175C 1B77                        2151          SR    R7,R7                                                  02009001
00175E 9200 C138      02138        2152          MVI   SCATEST,0                                              02010001
001762 4110 3001            00001  2153          LA    R1,1(,R3)                                              02011001
001766 1B22                        2154 DIG01    SR    R2,R2                                                  02012001
001768 DDFF 1000 C392 00000 02392  2155 DIG02    TRT   0(256,R1),DIG0                                         02013001
00176E 4780 B7C8            017C8  2156          BZ    DIGL0                  MORE THAN 256 BYTES             02014001
001772 1831                        2157          LR    R3,R1                                                  02015001
001774 1893                        2158          LR    R9,R3                                                  02016001
001776 47F2 B776            01776  2159          B     *(R2)                                                  02017001
00177A 47F0 B6C0            016C0  2160          B     DIG191                 +04                             02018001
00177E 47F0 B702            01702  2161          B     QTORLT                 +08                             02019001
001782 47F0 B7DE            017DE  2162          B     DECPOIN1               +12                             02020001
001786 47F0 B796            01796  2163          B     SCA0                   +16                             02021001
00178A 47F0 B79E            0179E  2164          B     ZETA0                  +20                             02022001
00178E 47F0 A842            00842  2165          B     RHO                    +24                             02023001
001792 47F0 B7A8            017A8  2166          B     OTHOP0                 +28                             02024001
                                   2167 *                                                                     02025001
001796 6800 C0F0            020F0  2168 SCA0     LD    0,ZEROFLOA             FLOATING ZERO                   02026001
00179A 47F0 B876            01876  2169          B     SCA1                                                   02027001
                                   2170 *                                                                     02028001
00179E 45F0 B2EE            012EE  2171 ZETA0    BAL   R15,ICHA               CHANGE INPUT BUFFER             02029001
0017A2 1813                        2172          LR    R1,R3                                                  02030001
0017A4 47F0 B766            01766  2173          B     DIG01                                                  02031001
                                   2174 *                                                                     02032001
0017A8 5940 BFE4            01FE4  2175 OTHOP0   C     R4,ZFILE5              OUTPUT BUFFER FULL ?            02033001
0017AC 47D0 B7B4            017B4  2176          BNH   OTHOP01                NO                              02034001
0017B0 45F0 B1AC            011AC  2177          BAL   R15,OUCHA              YES                             02035001
0017B4 D202 4003 BF54 00003 01F54  2178 OTHOP01  MVC   3(3,R4),ZERO           ADDR PART OF INTERNAL NAME      02036001
0017BA D201 4001 C132 00001 02132  2179          MVC   1(2,R4),ZINTYP         INDICATE INTEGER                02037001
0017C0 4140 4005            00005  2180          LA    R4,5(,R4)                                              02038001
0017C4 47F0 A24A            0024A  2181          B     GENTEST                                                02039001
                                   2182 *                                                                     02040001
0017C8 4110 1100            00100  2183 DIGL0    LA    R1,256(,R1)            UPDATE INPUT PTR                02041001
0017CC 47F0 B768            01768  2184          B     DIG02                                                  02042001
                                   2185 *                                                                     02043001
0017D0 4180 C082            02082  2186 DECPOIN  LA    R8,NUMBER                                              02044001
0017D4 4100 C095            02095  2187          LA    R0,NUMBER+19           MAX LENGTH OF CONSTANT + 1      02045001
0017D8 1B77                        2188          SR    R7,R7                                                  02046001
0017DA 9200 C138      02138        2189          MVI   SCATEST,0                                              02047001
0017DE 4190 3001            00001  2190 DECPOIN1 LA    R9,1(,R3)                                              02048001
0017E2 4110 3001            00001  2191 DECPOIN2 LA    R1,1(,R3)                                              02049001
0017E6 1B22                        2192 DECPOIN3 SR    R2,R2                                                  02050001
0017E8 DDFF 1000 C3F0 00000 023F0  2193 DECPOIN4 TRT   0(256,R1),DECPO                                        02051001
0017EE 4780 B864            01864  2194          BZ    DECPOINL               MORE THAN 256 BYTES             02052001
0017F2 1831                        2195          LR    R3,R1                                                  02053001
0017F4 47F2 B7F4            017F4  2196          B     *(R2)                                                  02054001
0017F8 47F0 B80C            0180C  2197          B     DECP0                  +04 ZERO                        02055001
0017FC 47F0 B820            01820  2198          B     QTORLTP                +08                             02056001
001800 47F0 B828            01828  2199          B     DECPSCA                +12 SCALE FACTOR                02057001
001804 47F0 B83C            0183C  2200          B     DECPZETA               +16 ZETA                        02058001
001808 47F0 B84C            0184C  2201          B     DECPOT                 +20 OTHER OPERATOR              02059001
                                   2202 *                                                                     02060001
00180C 1993                        2203 DECP0    CR    R9,R3                  ZERO FOLLOWING POINT ?          02061001
00180E 4770 B7E2            017E2  2204          BNE   DECPOIN2               NO                              02062001
001812 5980 C120            02120  2205          C     R8,NSTART              PRECEEDING SIGNIFICANT DIGIT ?  02063001
001816 4770 B7E2            017E2  2206          BNE   DECPOIN2               YES                             02064001
00181A 0670                        2207          BCTR  R7,0                   NO, DECREASE EXPONENT           02065001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

00181C 47F0 B7DE              017DE  2208           B     DECPOIN1                                              02066001
                                     2209 *                                                                     02067001
001820 45F0 B5B0              015B0  2210 QTORLTP   BAL   R15,MOVE                                              02068001
001824 47F0 B708              01708  2211           B     QTORLT1                                               02069001
                                     2212 *                                                                     02070001
001828 45F0 B59A              0159A  2213 DECPSCA   BAL   R15,MOVEP               SYNTAX CHECK AND MOVE         02071001
00182C 5980 C120              02120  2214           C     R8,NSTART               ZERO ?                        02072001
001830 4770 B876              01876  2215           BNE   SCA1                    NO                            02073001
001834 6800 C0F0              020F0  2216           LD    0,ZEROFLOA              YES, FLOATING ZERO            02074001
001838 47F0 B876              01876  2217           B     SCA1                                                  02075001
                                     2218 *                                                                     02076001
00183C 45F0 B5B0              015B0  2219 DECPZETA  BAL   R15,MOVE                                              02077001
001840 45F0 B2EE              012EE  2220           BAL   R15,ICHA                                              02078001
001844 1893                          2221           LR    R9,R3                                                 02079001
001846 1813                          2222           LR    R1,R3                                                 02080001
001848 47F0 B7E6              017E6  2223           B     DECPOIN3                                              02081001
                                     2224 *                                                                     02082001
00184C 5070 C154              02154  2225 DECPOT    ST    R7,ZEXCORR                                            02083001
001850 45F0 B59A              0159A  2226           BAL   R15,MOVEP               SYNTAX CHECK AND MOVE         02084001
001854 5980 C120              02120  2227           C     R8,NSTART               ZERO ?                        02085001
001858 4770 BA4A              01A4A  2228           BNE   REALCON                 NO, CONVERT NUMBER            02086001
00185C 6800 C0F0              020F0  2229           LD    0,ZEROFLOA              YES, NUMBER IS FLOATING ZERO  02087001
001860 47F0 BC8C              01C8C  2230           B     REALHAN                 MAKE A CONSTANT POOL ENTRY    02088001
                                     2231 *                                                                     02089001
001864 4110 1100              00100  2232 DECPOINL  LA    R1,256(,R1)             UPDATE INPUT PTR              02090001
001868 47F0 B7E8              017E8  2233           B     DECPOIN4                                              02091001
                                     2234 *                                                                     02092001
00186C 1B77                          2235 SCAFACT   SR    R7,R7                                                 02093001
00186E 6800 C0F8              020F8  2236           LD    0,ZONEFLOA              MANTISSA SET TO ONE           02094001
001872 4180 C082              02082  2237           LA    R8,NUMBER               NO MANTISSA DIGIT             02095001
001876 5080 C150              02150  2238 SCA1      ST    R8,ZTO                                                02096001
00187A 5070 C154              02154  2239           ST    R7,ZEXCORR                                            02097001
00187E 4180 C145              02145  2240           LA    R8,SCAWORK                                            02098001
001882 4100 C14E              0214E  2241           LA    R0,SCAWORK+9                                          02099001
001886 9210 C138        02138        2242           MVI   SCATEST,X'10'           SCALE FACTOR PRESENT          02100001
00188A 9200 C13A        0213A        2243           MVI   SCALE,0                 CLEAR OLD SIGN                02101001
00188E 4190 3001              00001  2244 SCA20     LA    R9,1(,R3)                                             02102001
001892 4110 3001              00001  2245 SCA2      LA    R1,1(,R3)                                             02103001
001896 1B22                          2246 SCA3      SR    R2,R2                                                 02104001
001898 DDFF 1000 C44E 00000 0244E    2247 SCA4      TRT   0(256,R1),SCAFAC                                      02105001
00189E 4780 B964              01964  2248           BZ    SCAL                    MORE THAN 256 BYTES           02106001
0018A2 1831                          2249           LR    R3,R1                                                 02107001
0018A4 47F2 B8A4              018A4  2250           B     *(R2)                                                 02108001
0018A8 47F0 B8C0              018C0  2251           B     SCA19                   +04                           02109001
0018AC 47F0 B8C8              018C8  2252           B     SCAZERO                 +08                           02110001
0018B0 47F0 B8D8              018D8  2253           B     SCASIGN                 +12                           02111001
0018B4 47F0 B946              01946  2254           B     SCAQL                   +16                           02112001
0018B8 47F0 B8EE              018EE  2255           B     SCAZETA                 +20                           02113001
0018BC 47F0 B8FE              018FE  2256           B     SCAOT                   +24                           02114001
                                     2257 *                                                                     02115001
0018C0 9620 C138        02138        2258 SCA19     OI    SCATEST,SF19            SIGNIFICANT DIGIT PRESENT     02116001
0018C4 47F0 B892              01892  2259           B     SCA2                                                  02117001
                                     2260 *                                                                     02118001
0018C8 9120 C138        02138        2261 SCAZERO   TM    SCATEST,SF19            ANY SIGNIFICANT DIGIT ?       02119001
0018CC 4710 B892              01892  2262           BO    SCA2                    YES                           02120001
0018D0 9640 C138        02138        2263           OI    SCATEST,SFL0            LEADING ZERO                  02121001
0018D4 47F0 B88E              0188E  2264           B     SCA20                                                 02122001
                                     2265 *                                                                     02123001
                        018D8        2266 SCASIGN   EQU   *                                                     02124001
0018D8 91E0 C138        02138        2267           TM    SCATEST,SFLSIGN         LEADING SIGN ?                02125001
0018DC 4770 B8FE              018FE  2268           BNZ   SCAOT                   NO, TREAT AS OTHER OPERATOR   02126001
0018E0 D200 C13A 3000 0213A 00000    2269           MVC   SCALE(1),0(R3)          SAVE SIGN                     02127001
0018E6 9680 C138        02138        2270           OI    SCATEST,SFSIGN          SIGNED SCALE FACTOR           02128001
0018EA 47F0 B88E              0188E  2271           B     SCA20                                                 02129001
                                     2272 *                                                                     02130001
0018EE 45F0 B5B0              015B0  2273 SCAZETA   BAL   R15,MOVE                SAVE FIELD                    02131001
0018F2 45F0 B2EE              012EE  2274           BAL   R15,ICHA                                              02132001
0018F6 1813                          2275           LR    R1,R3                                                 02133001
0018F8 1893                          2276           LR    R9,R3                                                 02134001
0018FA 47F0 B896              01896  2277           B     SCA3                                                  02135001
                                     2278 *                                                                     02136001
0018FE 9160 C138        02138        2279 SCAOT     TM    SCATEST,SFDIGIT         ANY DIGIT ?                   02137001
001902 4780 B946              01946  2280           BZ    SCAQL                   NO, ERROR MESSAGE             02138001
001906 9120 C138        02138        2281           TM    SCATEST,SF19            ANY SIGNIFICANT DIGIT ?       02139001
00190A 4780 B934              01934  2282           BZ    SCAOT1                  NO                            02140001
00190E 45F0 B5B0              015B0  2283           BAL   R15,MOVE                                              02141001
001912 5B80 C15C              0215C  2284           S     R8,SCAWORKA                                           02142001
001916 4480 B940              01940  2285           EX    R8,SCAPACK                                            02143001
00191A D100 C0EF C136 020EF 02136    2286           MVN   ZPACK+7(1),SREF         SET SIGN TO PLUS              02144001
001920 9501 C13A        0213A        2287           CLI   SCALE,XFMINUS           MINUS SIGN ?                  02145001
001924 4770 B92E              0192E  2288           BNE   *+10                    NO                            02146001
001928 D100 C0EF C137 020EF 02137    2289           MVN   ZPACK+7(1),SREF+1       YES, REPLACE PLUS SIGN        02147001
00192E 4F50 C0E8              020E8  2290           CVB   R5,ZPACK                CONVERT                       02148001
001932 1A75                          2291           AR    R7,R5                   GET EXPONENT                  02149001
                                     2292 *                                                                     02150001
001934 5080 C158              02158  2293 SCAOT1    ST    R8,ZTOSCA                                             02151001
001938 5880 C150              02150  2294           L     R8,ZTO                                                02152001
00193C 47F0 BA4A              01A4A  2295           B     REALCON                                               02153001
                                     2296 *                                                                     02154001
001940 F270 C0E8 C145 020E8 02145    2297 SCAPACK   PACK  ZPACK(8),SCAWORK(0)                                   02155001
                                     2298 *                                                                     02156001
001946 45F0 B5B0              015B0  2299 SCAQL     BAL   R15,MOVE                                              02157001
00194A 5B80 C15C              0215C  2300           S     R8,SCAWORKA             SCALE FACTOR LENGTH           02158001
00194E 5080 C158              02158  2301           ST    R8,ZTOSCA                                             02159001
001952 5880 C150              02150  2302           L     R8,ZTO                                                02160001
001956 4520 B96C              0196C  2303           BAL   R2,CERR                 REBUILD CONSTANT              02161001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

00195A D201 C014 BF78 02014 01F78  2304          MVC   ZERRONU,INVOP                                       02162001
001960 47F0 B4CE            014CE  2305          B     INCOROP                                             02163001
                                   2306 *                                                                  02164001
001964 4110 1100            00100  2307 SCAL     LA    R1,256(,R1)            UPDATE INPUT PTR             02165001
001968 47F0 B898            01898  2308          B     SCA4                                                02166001
                                   2309 *                                                                  02167001
                                   2310 *        CONSTANT ERROR ROUTINE                                    02168001
                                   2311 *                                                                  02169001
00196C 9108 C138      02138        2312 CERR     TM    SCATEST,PRECERR        CONSTANT ALREADY REBUILT ?   02170001
001970 0712                        2313          BOR   R2                     YES                          02171001
001972 5850 C154            02154  2314          L     R5,ZEXCORR             NUMBER OF INTEGERS IN MANTISSA 02172001
001976 1255                        2315          LTR   R5,R5                  LEADING ZEROS AFTER POINT ?  02173001
001978 4740 B9A4            019A4  2316          BM    CERR1                  YES                          02174001
00197C 4950 BF68            01F68  2317          CH    R5,KH12                CONSTANT TOO LONG ?          02175001
001980 47D0 B988            01988  2318          BNH   CERRA                  NO                           02176001
001984 4850 BF68            01F68  2319          LH    R5,KH12                SET MAXIMAL LENGTH           02177001
001988 4450 B9F2            019F2  2320 CERRA    EX    R5,CERREX              MOVE CONSTANT INTEGERS       02178001
00198C 5A50 C0A8            020A8  2321          A     R5,OPSTART             ADDR DECIMAL POINT           02179001
001990 923E 5000      00000        2322          MVI   0(R5),XFDECPT          INSERT POINT                 02180001
001994 0680                        2323          BCTR  R8,0                                                02181001
001996 1985                        2324          CR    R8,R5                  ANY DECIMAL POINT ?          02182001
001998 4780 B9A0            019A0  2325          BE    *+8                    NO                           02183001
00199C 4180 8001            00001  2326          LA    R8,1(,R8)              PREVENT POINT OVERLAY        02184001
0019A0 47F0 B9A8            019A8  2327          B     CERR2                                               02185001
                                   2328 *                                                                  02186001
0019A4 923E C081      02081        2329 CERR1    MVI   ZIDEX,XFDECPT          INSERT POINT                 02187001
0019A8 9110 C138      02138        2330 CERR2    TM    SCATEST,SF             SCALE FACTOR PRESENT ?       02188001
0019AC 4780 B9DA            019DA  2331          BZ    CERR3                  NO                           02189001
0019B0 4100 C097            02097  2332          LA    R0,NUMBER+21                                        02190001
0019B4 D201 8000 C139 00000 02139  2333          MVC   0(2,R8),SCALEQ         INSERT QUOTE AND SIGN        02191001
0019BA 9180 C138      02138        2334          TM    SCATEST,SFSIGN         SIGNED SCALE FACTOR ?        02192001
0019BE 4710 B9C4            019C4  2335          BO    *+6                    YES                          02193001
0019C2 0680                        2336          BCTR  R8,0                                                02194001
0019C4 4180 8002            00002  2337          LA    R8,2(,R8)                                           02195001
0019C8 5810 C158            02158  2338          L     R1,ZTOSCA                                           02196001
0019CC 4110 1001            00001  2339          LA    R1,1(,R1)              SCALE FACTOR LENGTH          02197001
0019D0 4190 C145            02145  2340          LA    R9,SCAWORK                                          02198001
0019D4 1A19                        2341          AR    R1,R9                  SCALE FACTOR END ADDR        02199001
0019D6 45F0 B5B0            015B0  2342          BAL   R15,MOVE               MOVE SCALE FACTOR            02200001
                                   2343 *                                                                  02201001
0019DA 4150 C08D            0208D  2344 CERR3    LA    R5,ZIDEX+12                                         02202001
0019DE 1985                        2345          CR    R8,R5                  MORE THAN 12 CHARACTERS ?    02203001
0019E0 47D0 B9E6            019E6  2346          BNH   *+6                    NO                           02204001
0019E4 1885                        2347          LR    R8,R5                  YES, SET LENGTH TO 12        02205001
0019E6 5080 C010            02010  2348          ST    R8,ZENDERR                                          02206001
0019EA D203 C00C C0A8 0200C 020A8  2349          MVC   ZBEGERR,OPSTART                                     02207001
0019F0 07F2                        2350          BR    R2                                                  02208001
                                   2351 *                                                                  02209001
0019F2 D200 C081 C082 02081 02082  2352 CERREX   MVC   ZIDEX(0),NUMBER                                     02210001
                                   2353 *                                                                  02211001
0019F8 4970 BF64            01F64  2354 INTCON   CH    R7,KH10                NUMBER OF DIGITS ?           02212001
0019FC 4740 BA0E            01A0E  2355          BL    INTCON1                NO                           02213001
001A00 4720 BA22            01A22  2356          BH    INTCON2                YES, REAL CONSTANT           02214001
001A04 D509 9000 C13B 00000 0213B  2357          CLC   0(10,R9),MAXINT        MAXIMAL INTEGER              02215001
001A0A 4720 BA22            01A22  2358          BH    INTCON2                GREATER, REAL CONSTANT       02216001
001A0E 0670                        2359 INTCON1  BCTR  R7,0                                                02217001
001A10 4470 BA44            01A44  2360          EX    R7,INTPACK             PACK                         02218001
001A14 D100 C0EF C136 020EF 02136  2361          MVN   ZPACK+7(1),SREF        SET PLUS SIGN                02219001
001A1A 4F20 C0E8            020E8  2362          CVB   R2,ZPACK               PACK                         02220001
001A1E 47F0 BB6E            01B6E  2363          B     INTHAN                                              02221001
                                   2364 *                                                                  02222001
001A22 5090 C00C            0200C  2365 INTCON2  ST    R9,ZBEGERR             GIVE ERROR MESSAGE           02223001
001A26 5010 C010            02010  2366          ST    R1,ZENDERR                                          02224001
001A2A D201 C014 BF7E 02014 01F7E  2367          MVC   ZERRONU,RANGEINT                                    02225001
001A30 45F0 B52C            0152C  2368          BAL   R15,MOVERRO                                         02226001
001A34 5070 C154            02154  2369          ST    R7,ZEXCORR                                          02227001
001A38 5880 C120            02120  2370          L     R8,NSTART                                           02228001
001A3C 45F0 B5B0            015B0  2371          BAL   R15,MOVE                                            02229001
001A40 47F0 BA4A            01A4A  2372          B     REALCON                                             02230001
                                   2373 *                                                                  02231001
001A44 F270 C0E8 9000 020E8 00000  2374 INTPACK  PACK  ZPACK(8),0(0,R9)       LENGTH IN R1                 02232001
                                   2375 *                                                                  02233001
001A4A 1868                        2376 REALCON  LR    R6,R8                  GET LENGTH OF CONSTANT       02234001
001A4C 5B60 C120            02120  2377          S     R6,NSTART                                           02235001
001A50 4780 BA9A            01A9A  2378          BZ    REALCON7                                            02236001
                                   2379 *                                                                  02237001
                                   2380 *        CONVERT MANTISSA TO FLOATING FORM                         02238001
                                   2381 *                                                                  02239001
001A54 6800 C0F0            020F0  2382          LD    0,ZEROFLOA             ZERO REG                     02240001
001A58 1896                        2383          LR    R9,R6                  NUMBER OF DIGITS             02241001
001A5A 1B79                        2384          SR    R7,R9                  UPDATE EXPONENT CORRECTION   02242001
001A5C 4990 BF62            01F62  2385          CH    R9,KH9                 CONVERSION IN ONE STEP ?     02243001
001A60 4720 BAF6            01AF6  2386          BH    REALCON1               NO                           02244001
001A64 0690                        2387          BCTR  R9,0                                                02245001
001A66 4490 BB30            01B30  2388          EX    R9,REPACK              PACK                         02246001
001A6A D100 C0EF C136 020EF 02136  2389 REALCON2 MVN   ZPACK+7(1),SREF        SET PLUS SIGN                02247001
001A70 4F50 C0E8            020E8  2390          CVB   R5,ZPACK               CONVERT TO BINARY            02248001
001A74 5050 C10C            0210C  2391          ST    R5,ZFLOFIEL+4          CONVERT TO FLOATING FORM     02249001
001A78 6A00 C108            02108  2392          AD    0,ZFLOFIEL             GET NORMALIZED FLOATING NUMBER 02250001
001A7C 5960 C12C            0212C  2393          C     R6,NREAL               MORE DIGITS THAN ALLOWED ?   02251001
001A80 47D0 BAA0            01AA0  2394          BNH   REALCON3               NO                           02252001
001A84 4520 B96C            0196C  2395          BAL   R2,CERR                REBUILD CONSTANT             02253001
001A88 D201 C014 BF80 02014 01F80  2396          MVC   ZERRONU,PRECREAL                                    02254001
001A8E 45F0 B52C            0152C  2397          BAL   R15,MOVERRO                                         02255001
001A92 9608 C138      02138        2398          OI    SCATEST,PRECERR        INDICATE PRECISION ERROR     02256001
001A96 47F0 BAA0            01AA0  2399          B     REALCON3                                            02257001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                     2400 *                                                                    02258001
                                     2401 *        CONVERT EXPONENT TO FLOATING FORM                           02259001
                                     2402 *                                                                    02260001
001A9A 2200                          2403 REALCON7 LTDR  0,0                                                   02261001
001A9C 4780 BC8C             01C8C   2404          BZ    REALHAN              NUMBER OF DIGITS                 02262001
001AA0 1097                          2405 REALCON3 LPR   R9,R7                UPDATE EXPONENT CORRECTION       02263001
001AA2 4780 BC8C             01C8C   2406          BZ    REALHAN              CONVERSION IN ONE STEP ?         02264001
001AA6 1819                          2407          LR    R1,R9                NO                               02265001
001AA8 4120 C180             02180   2408          LA    R2,ZEXTABP-8                                          02266001
001AAC 1277                          2409          LTR   R7,R7                PACK                             02267001
001AAE 4720 BAB6             01AB6   2410          BP    REALCON6             SET PLUS SIGN                    02268001
001AB2 4120 C1F8             021F8   2411          LA    R2,ZEXTABN-8         CONVERT TO BINARY                02269001
001AB6 4990 BF70             01F70   2412 REALCON6 CH    R9,KH64              CONVERT TO FLOATING FORM         02270001
001ABA 47B0 BAE4             01AE4   2413          BNL   REALCON5             GET NORMALIZED FLOATING NUMBER   02271001
001ABE 5490 C124             02124   2414          N     R9,SCALEMSK                                           02272001
001AC2 4780 BACA             01ACA   2415          BZ    REALCON8             MORE DIGITS THAN ALLOWED ?       02273001
001AC6 6C09 2038             00038   2416          MD    0,56(R9,R2)          NO                               02274001
001ACA 8B10 0003             00003   2417 REALCON8 SLA   R1,3                                                  02275001
001ACE 5410 C124             02124   2418          N     R1,SCALEMSK                                           02276001
001AD2 4780 BADA             01ADA   2419          BZ    REALCON9             INDICATE PRECISION ERROR         02277001
001AD6 6C01 2000             00000   2420          MD    0,0(R1,R2)                                            02278001
001ADA 2200                          2421 REALCON9 LTDR  0,0                  EXPONENT UNDERFLOW               02279001
001ADC 4780 BB58             01B58   2422          BZ    REALERR1                                              02280001
001AE0 47F0 BC8C             01C8C   2423          B     REALHAN                                               02281001
                                     2424 *                                                                    02282001
001AE4 6C00 2078             00078   2425 REALCON5 MD    0,120(,R2)           10 ** +- 64                      02283001
001AE8 2200                          2426          LTDR  0,0                                                   02284001
001AEA 4780 BB58             01B58   2427          BZ    REALERR1                                              02285001
001AEE 4B90 BF70             01F70   2428          SH    R9,KH64              ADJUST EXPONENT                  02286001
001AF2 47F0 BAB6             01AB6   2429          B     REALCON6                                              02287001
                                     2430 *                                                                    02288001
001AF6 4B90 BF64             01F64   2431 REALCON1 SH    R9,KH10                                               02289001
001AFA 4990 BF62             01F62   2432          CH    R9,KH9               CONSTANT TOO LONG ?              02290001
001AFE 4740 BB08             01B08   2433          BL    REALCONA             NO                               02291001
001B02 0690                          2434          BCTR  R9,0                 YES, SKIP THE NINETEENTH DIGIT   02292001
001B04 4A70 BF5A             01F5A   2435          AH    R7,KH1               UPDATE R7                        02293001
001B08 4490 BB30             01B30   2436 REALCONA EX    R9,REPACK            PACK FIRST PART                  02294001
001B0C D100 C0EF C136 020EF 02136    2437          MVN   ZPACK+7(1),SREF      SET PLUS SIGN                    02295001
001B12 4F50 C0E8             020E8   2438          CVB   R5,ZPACK             CONVERT TO BINARY                02296001
001B16 5050 C10C             0210C   2439          ST    R5,ZFLOFIEL+4        CONVERT TO FLOATING FORM         02297001
001B1A 6A00 C108             02108   2440          AD    0,ZFLOFIEL           NORMALIZE                        02298001
001B1E 6C00 C100             02100   2441          MD    0,ZTEN9              MULTIPLY BY 10 ** 9              02299001
001B22 4199 C083             02083   2442          LA    R9,NUMBER+1(R9)      ADDR SECOND PART                 02300001
001B26 F278 C0E8 9000 020E8 00000    2443          PACK  ZPACK(8),0(9,R9)     PACK SECOND PART                 02301001
001B2C 47F0 BA6A             01A6A   2444          B     REALCON2             TERMINATE CONVERSION             02302001
                                     2445 *                                                                    02303001
001B30 F270 C0E8 C082 020E8 02082    2446 REPACK   PACK  ZPACK(8),NUMBER(0)   LENGTH OF NUMBER IN R9           02304001
                                     2447 *                                                                    02305001
001B36 4150 BC8C             01C8C   2448 REALERR  LA    R5,REALHAN           SET EXIT ADDR                    02306001
001B3A 5050 C06C             0206C   2449          ST    R5,ZSTO                                               02307001
001B3E D202 1009 C06D 00009 0206D    2450          MVC   9(3,R1),ZSTO+1       MODIFIED OLD PSW IN PIE          02308001
001B44 4520 B96C             0196C   2451          BAL   R2,CERR              REBUILD CONSTANT                 02309001
001B48 D201 C014 BF7C 02014 01F7C    2452          MVC   ZERRONU,RANGEREA                                      02310001
001B4E 45F0 B52C             0152C   2453          BAL   R15,MOVERRO                                           02311001
001B52 9680 D080       00080         2454          OI    COMPFLGS,COMPMODE    SET SYNTAX CHECK MODE            02312001
001B56 07FE                          2455          BR    R14                                                   02313001
                                     2456 *                                                                    02314001
001B58 4520 B96C             0196C   2457 REALERR1 BAL   R2,CERR              REBUILD CONSTANT                 02315001
001B5C D201 C014 BF7C 02014 01F7C    2458          MVC   ZERRONU,RANGEREA                                      02316001
001B62 45F0 B52C             0152C   2459          BAL   R15,MOVERRO                                           02317001
001B66 9680 D080       00080         2460          OI    COMPFLGS,COMPMODE    SET SYNTAX CHECK MODE            02318001
001B6A 47F0 BC8C             01C8C   2461          B     REALHAN                                               02319001
                                     2462 *                                                                    02320001
                                     2463 *        INTEGER HANDLING                                            02321001
                                     2464 *                                                                    02322001
001B6E 5940 BFE4             01FE4   2465 INTHAN   C     R4,ZFILE5            SPACE ENOUGH IN OUTPUT BUFFER ?  02323001
001B72 47D0 BB7A             01B7A   2466          BNH   INTHANA              YES                              02324001
001B76 45F0 B1AC             011AC   2467          BAL   R15,OUCHA            NO, CHANGE BUFFER                02325001
001B7A D201 4001 C132 00001 02132    2468 INTHANA  MVC   1(2,R4),ZINTYP       FIRST TWO BYTES OF INTERNAL NAME 02326001
001B80 4920 BF6A             01F6A   2469 INTHANR  CH    R2,KH15              NUMBER GREATER THAN 15 ?         02327001
001B84 4720 BBA2             01BA2   2470          BH    INTHAN2              YES                              02328001
001B88 8B20 0002             00002   2471          SLA   R2,2                 NO, MULTIPLY BY 4                02329001
001B8C 4020 C130             02130   2472          STH   R2,ZLIRE                                              02330001
001B90 9200 4003       00003         2473          MVI   3(R4),0              OUTPUT                           02331001
001B94 D201 4004 C130 00004 02130    2474          MVC   4(2,R4),ZLIRE        FIELD                            02332001
001B9A 4140 4005             00005   2475          LA    R4,5(,R4)            UPDATE OUTPUT POINTER            02333001
001B9E 47F0 A24A             0024A   2476          B     GENTEST              RETURN                           02334001
                                     2477 *                                                                    02335001
001BA2 9180 D080       00080         2478 INTHAN2  TM    COMPFLGS,COMPMODE    SYNTAX CHECK MODE ?              02336001
001BA6 4710 BBCC             01BCC   2479          BO    INTHAN1              YES                              02337001
001BAA 41E0 BBC2             01BC2   2480          LA    R14,INTHAN6          INITIALIZE INTEGER SEARCH        02338001
001BAE 4180 0004             00004   2481          LA    R8,4                                                  02339001
001BB2 5890 C118             02118   2482          L     R9,ZWP                                                02340001
001BB6 5870 C11C             0211C   2483          L     R7,ZDWP                                               02341001
001BBA 5810 C0DC             020DC   2484          L     R1,ZLITSTA                                            02342001
001BBE 1B18                          2485          SR    R1,R8                                                 02343001
001BC0 1B98                          2486          SR    R9,R8                                                 02344001
001BC2 8618 BBE8             01BE8   2487 INTHAN6  BXH   R1,R8,INTHAN3        EXIT FOR END OF SEARCH           02345001
001BC6 5920 1000             00000   2488          C     R2,0(,R1)            INTEGER FOUND ?                  02346001
001BCA 077E                          2489          BNER  R14                  NO, PROCEED SEARCH               02347001
                                     2490 *                                                                    02348001
001BCC 5B10 C0D4             020D4   2491 INTHAN1  S     R1,ZKOPOOL           GET REL ADDR                     02349001
001BD0 4010 C130             02130   2492          STH   R1,ZLIRE             IN CONST POOL                    02350001
001BD4 D200 4003 D0A1 00003 000A1    2493          MVC   3(1,R4),KBN+1        INSERT CONSTANT BLOCK NUMBER     02351001
001BDA D201 4004 C130 00004 02130    2494          MVC   4(2,R4),ZLIRE        DISPLACEMENT ADDR                02352001
001BE0 4140 4005             00005   2495          LA    R4,5(,R4)                                             02353001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

001BE4 47F0 A24A            0024A  2496          B     GENTEST                                          02354001
                                   2497 *                                                               02355001
001BE8 1A98                        2498 INTHAN3  AR    R9,R8                                            02356001
001BEA 1997                        2499          CR    R9,R7                   DOUBLE WORD BOUNDARY ?   02357001
001BEC 4780 BC16            01C16  2500          BE    INTHAN9                 YES                      02358001
                                   2501 *                                                               02359001
001BF0 4110 1004            00004  2502 INTHAN4  LA    R1,4(,R1)               SCAN REST OF CONSTANT POOL 02360001
001BF4 1917                        2503          CR    R1,R7                   CURRENT END OF CONSTANT POOL ? 02361001
001BF6 4780 BC06            01C06  2504          BE    INTHAN10                YES                      02362001
001BFA 5920 1000            00000  2505          C     R2,0(,R1)               LITERAL FOUND ?          02363001
001BFE 4770 BBF0            01BF0  2506          BNE   INTHAN4                 NO                       02364001
001C02 4780 BBCC            01BCC  2507          BE    INTHAN1                                          02365001
                                   2508 *                                                               02366001
001C06 1819                        2509 INTHAN10 LR    R1,R9                                            02367001
001C08 1897                        2510          LR    R9,R7                                            02368001
001C0A 5090 C118            02118  2511 INTHAN7  ST    R9,ZWP                  SAVE PTR                 02369001
001C0E 5020 1000            00000  2512          ST    R2,0(,R1)               MAKE LITERAL POOL ENTRY  02370001
001C12 47F0 BBCC            01BCC  2513          B     INTHAN1                                          02371001
                                   2514 *                                                               02372001
001C16 5990 C0D8            020D8  2515 INTHAN9  C     R9,ZKOPEND              END OF LITERAL POOL ?    02373001
001C1A 47B0 BC3A            01C3A  2516          BNL   INTHAN8                                          02374001
001C1E 5990 C0E0            020E0  2517          C     R9,ZTEXTCO              WRITE TXT CARD ?         02375001
001C22 4740 BC2A            01C2A  2518          BL    INTHAN5                 NO                       02376001
001C26 45E0 BDD4            01DD4  2519          BAL   R14,TXTTRAF             WRITE                    02377001
001C2A 4190 9004            00004  2520 INTHAN5  LA    R9,4(,R9)               UPDATE POINTERS          02378001
001C2E 5A70 C128            02128  2521          A     R7,LREAL                                         02379001
001C32 5070 C11C            0211C  2522          ST    R7,ZDWP                 SAVE UPDATE ZDWP         02380001
001C36 47F0 BC0A            01C0A  2523          B     INTHAN7                                          02381001
                                   2524 *                                                               02382001
001C3A D501 C0E4 BF72 020E4 01F72  2525 INTHAN8  CLC   ZKBNMAX(2),KH255        LAST CONST POOL          02383001
001C40 4780 BC72            01C72  2526          BE    INTHAN11                YES, GIVE ERROR MESSAGE  02384001
001C44 5890 C11C            0211C  2527          L     R9,ZDWP                                          02385001
001C48 45E0 BDD4            01DD4  2528          BAL   R14,TXTTRAF             OUTPUT TXT RECORD        02386001
001C4C 45E0 BDB2            01DB2  2529          BAL   R14,CPOLEX              CONSTANT POOL EXCHANGE   02387001
001C50 5810 C0D4            020D4  2530          L     R1,ZKOPOOL              START ADDR OF CONSTANT POOL 02388001
001C54 4190 1004            00004  2531          LA    R9,4(,R1)               UPDATE POINTERS          02389001
001C58 1871                        2532          LR    R7,R1                                            02390001
001C5A 5A70 C128            02128  2533          A     R7,LREAL                                         02391001
001C5E 5090 C118            02118  2534          ST    R9,ZWP                                           02392001
001C62 5070 C11C            0211C  2535          ST    R7,ZDWP                                          02393001
001C66 5010 C0DC            020DC  2536          ST    R1,ZLITSTA                                       02394001
001C6A 5020 1000            00000  2537          ST    R2,0(,R1)                                        02395001
001C6E 47F0 BBCC            01BCC  2538          B     INTHAN1                                          02396001
                                   2539 *                                                               02397001
001C72 5010 C00C            0200C  2540 INTHAN11 ST    R1,ZBEGERR              GIVE                     02398001
001C76 5010 C010            02010  2541          ST    R1,ZENDERR              ERROR                    02399001
001C7A D201 C014 BF84 02014 01F84  2542          MVC   ZERRONU,MANYCON                                  02400001
001C80 45F0 B52C            0152C  2543          BAL   R15,MOVERRO             GOTO ERROR RTN           02401001
001C84 9680 D080      00080        2544          OI    COMPFLGS,COMPMODE       SET SYNTAX CHECK MODE    02402001
001C88 47F0 BBCC            01BCC  2545          B     INTHAN1                                          02403001
                                   2546 *                                                               02404001
001C8C 5940 BFE4            01FE4  2547 REALHAN  C     R4,ZFILE5               SPACE ENOUGH IN OUTPUT BUFFER ? 02405001
001C90 47D0 BC98            01C98  2548          BNH   REALHANA                YES                      02406001
001C94 45F0 B1AC            011AC  2549          BAL   R15,OUCHA               NO, CHANGE BUFFER        02407001
001C98 D201 4001 C134 00001 02134  2550 REALHANA MVC   1(2,R4),ZREALTYP        FIRST TWO BYTES OF INTERNAL NAME 02408001
001C9E 9500 C0B1      020B1        2551          CLI   ZFORTEST,0              IN FOR LIST ?            02409001
001CA2 4780 BCAE            01CAE  2552          BE    REALHAN1                NO                       02410001
001CA6 5850 C0CC            020CC  2553          L     R5,ZFSPTR               ADDR FSTAB ENTRY         02411001
001CAA 9680 5000      00000        2554          OI    0(R5),NOCOUNT           CLASSIFY AS NO COUNTING LOOP 02412001
001CAE 9102 D080      00080        2555 REALHAN1 TM    COMPFLGS,LNG            LONG PRECISION ?         02413001
001CB2 4710 BCD0            01CD0  2556          BO    REALH                   YES, BRANCH              02414001
001CB6 7000 C06C            0206C  2557          STE   0,ZSTO                  START ROUNDING           02415001
001CBA D200 C110 C06C 02110 0206C  2558          MVC   ROUND(1),ZSTO                                    02416001
001CC0 6A00 C110            02110  2559          AD    0,ROUND                 ROUND                    02417001
001CC4 7000 C06C            0206C  2560          STE   0,ZSTO                  SHORT, TREAT AS INTEGER  02418001
001CC8 5820 C06C            0206C  2561          L     R2,ZSTO                                          02419001
001CCC 47F0 BB80            01B80  2562          B     INTHANR                                          02420001
                                   2563 *                                                               02421001
001CD0 5810 C0DC            020DC  2564 REALH    L     R1,ZLITSTA              INITIALIZE LITERAL SEARCH 02422001
001CD4 9180 D080      00080        2565          TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?      02423001
001CD8 4710 BBCC            01BCC  2566          BO    INTHAN1                 YES                      02424001
001CDC 4160 0008            00008  2567          LA    R6,8                                             02425001
001CE0 1886                        2568          LR    R8,R6                                            02426001
001CE2 1B16                        2569          SR    R1,R6                                            02427001
001CE4 5890 C118            02118  2570          L     R9,ZWP                                           02428001
001CE8 5870 C11C            0211C  2571          L     R7,ZDWP                                          02429001
001CEC 1997                        2572          CR    R9,R7                                            02430001
001CEE 4780 BD3C            01D3C  2573          BE    REALH2                                           02431001
001CF2 1B76                        2574          SR    R7,R6                                            02432001
001CF4 41E0 BCF8            01CF8  2575          LA    R14,REALH3                                       02433001
001CF8 8618 BD02            01D02  2576 REALH3   BXH   R1,R8,REALH4            EXIT AT END OF SEARCH    02434001
001CFC 6900 1000            00000  2577          CD    0,0(,R1)                LITERAL FOUND ?          02435001
001D00 077E                        2578          BNER  R14                     NO                       02436001
                                   2579 *                                                               02437001
001D02 41E0 BD08            01D08  2580 REALH4   LA    R14,REALH5                                       02438001
001D06 1B16                        2581          SR    R1,R6                                            02439001
001D08 8616 BD16            01D16  2582 REALH5   BXH   R1,R6,REALH6            EXIT AT END OF SCAN      02440001
001D0C 6900 1000            00000  2583          CD    0,0(,R1)                CONSTANT FOUND ?         02441001
001D10 077E                        2584          BNER  R14                     NO                       02442001
001D12 47F0 BBCC            01BCC  2585          B     INTHAN1                 YES                      02443001
                                   2586 *                                                               02444001
001D16 1A76                        2587 REALH6   AR    R7,R6                                            02445001
001D18 5970 C0D8            020D8  2588          C     R7,ZKOPEND              END OF LITERAL POOL ?    02446001
001D1C 47B0 BD66            01D66  2589          BNL   REALH10                 YES                      02447001
001D20 1A76                        2590 REALH8   AR    R7,R6                   UPDATE ZDWP              02448001
001D22 5070 C11C            0211C  2591          ST    R7,ZDWP                                          02449001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

001D26 6000 1000              00000  2592          STD   0,0(,R1)                                     02450001
001D2A 47F0 BBCC              01BCC  2593          B     INTHAN1                                      02451001
                                     2594 *                                                           02452001
001D2E 45E0 BDD4              01DD4  2595 REALH7   BAL   R14,TXTTRAF          OUTPUT TXT              02453001
001D32 1A87                          2596 REALH9   AR    R8,R7                UPDATE ZWP              02454001
001D34 5080 C118              02118  2597          ST    R8,ZWP                                       02455001
001D38 47F0 BD20              01D20  2598          B     REALH8                                       02456001
                                     2599 *                                                           02457001
001D3C 41E0 BD42              01D42  2600 REALH2   LA    R14,REALH21                                  02458001
001D40 1B76                          2601          SR    R7,R6                                        02459001
001D42 8616 BD50              01D50  2602 REALH21  BXH   R1,R6,REALH22        EXIT AT END OF SCAN     02460001
001D46 6900 1000              00000  2603          CD    0,0(,R1)             LITERAL FOUND ?         02461001
001D4A 077E                          2604          BNER  R14                  NO                      02462001
001D4C 47F0 BBCC              01BCC  2605          B     INTHAN1              YES                     02463001
                                     2606 *                                                           02464001
001D50 1A76                          2607 REALH22  AR    R7,R6                                        02465001
001D52 5970 C0D8              020D8  2608          C     R7,ZKOPEND           END OF LITERAL POOL     02466001
001D56 47B0 BD66              01D66  2609          BNL   REALH10                                      02467001
001D5A 5970 C0E0              020E0  2610          C     R7,ZTEXTCO           TXT TO BE PUT OUT ?     02468001
001D5E 4740 BD32              01D32  2611          BL    REALH9               NO                      02469001
001D62 47F0 BD2E              01D2E  2612          B     REALH7               YES                     02470001
                                     2613 *                                                           02471001
001D66 D501 C0E4 BF72 020E4 01F72  2614 REALH10  CLC   ZKBNMAX(2),KH255     LAST CONSTANT POOL ?    02472001
001D6C 4780 BD98              01D98  2615          BE    REALH11              YES                     02473001
001D70 5890 C11C              0211C  2616          L     R9,ZDWP                                      02474001
001D74 45E0 BDD4              01DD4  2617          BAL   R14,TXTTRAF          OUTPUT TXT              02475001
001D78 45E0 BDB2              01DB2  2618          BAL   R14,CPOLEX           CONSTANT POOL EXCHANGE  02476001
001D7C 5810 C0D4              020D4  2619          L     R1,ZKOPOOL           START ADDR OF CONSTANT POOL 02477001
001D80 4170 1008              00008  2620          LA    R7,8(,R1)            UPDATE PTRS             02478001
001D84 5070 C11C              0211C  2621          ST    R7,ZDWP                                      02479001
001D88 5070 C118              02118  2622          ST    R7,ZWP                                       02480001
001D8C 5010 C0DC              020DC  2623          ST    R1,ZLITSTA                                   02481001
001D90 6000 1000              00000  2624          STD   0,0(,R1)             LITERAL ENTRY           02482001
001D94 47F0 BBCC              01BCC  2625          B     INTHAN1                                      02483001
                                     2626 *                                                           02484001
001D98 5030 C00C              0200C  2627 REALH11  ST    R3,ZBEGERR           TOO MANY LITERALS, MESSAGE 02485001
001D9C 5030 C010              02010  2628          ST    R3,ZENDERR                                   02486001
001DA0 D201 C014 BF84 02014 01F84  2629          MVC   ZERRONU,MANYCON                              02487001
001DA6 45F0 B52C              0152C  2630          BAL   R15,MOVERRO                                  02488001
001DAA 9680 D080        00080        2631          OI    COMPFLGS,COMPMODE    SET SYNTAX CHECK MODE   02489001
001DAE 47F0 BBCC              01BCC  2632          B     INTHAN1                                      02490001
                                     2633 *                                                           02491001
                                     2634 *        CONSTANT POOL EXCHANGE                             02492001
                                     2635 *                                                           02493001
001DB2 58F0 C0D4              020D4  2636 CPOLEX   L     R15,ZKOPOOL          UPDATE                  02494001
001DB6 50F0 C0DC              020DC  2637          ST    R15,ZLITSTA                                  02495001
001DBA 4AF0 C0E6              020E6  2638          AH    R15,TXTPUT                                   02496001
001DBE 50F0 C0E0              020E0  2639          ST    R15,ZTEXTCO          TXT RECORD POINTER      02497001
001DC2 48F0 C0E4              020E4  2640          LH    R15,ZKBNMAX                                  02498001
001DC6 41F0 F001              00001  2641          LA    R15,1(,R15)                                  02499001
001DCA 40F0 C0E4              020E4  2642          STH   R15,ZKBNMAX          CONSTANT POOL           02500001
001DCE 40F0 D0A0              000A0  2643          STH   R15,KBN              NUMBER                  02501001
001DD2 07FE                          2644          BR    R14                  RETURN                  02502001
                                     2645 *                                                           02503001
                                     2646 *        TRANSFER TXT RECORD                                02504001
                                     2647 *                                                           02505001
001DD4 90E6 BF1C              01F1C  2648 TXTTRAF  STM   R14,R6,TXTSAV        SAVE REGS               02506001
001DD8 5820 C0E0              020E0  2649          L     R2,ZTEXTCO                                   02507001
001DDC 4B20 C0E6              020E6  2650          SH    R2,TXTPUT            ADDR OUTPUT TXT         02508001
001DE0 1859                          2651          LR    R5,R9                CALCULATE LENGTH OF TXT 02509001
001DE2 1B52                          2652          SR    R5,R2                                        02510001
001DE4 4050 BE02              01E02  2653          STH   R5,TXTLE                                     02511001
001DE8 1859                          2654          LR    R5,R9                GET NEW PUT ADDR        02512001
001DEA 4A50 C0E6              020E6  2655          AH    R5,TXTPUT                                    02513001
001DEE 5050 C0E0              020E0  2656          ST    R5,ZTEXTCO                                   02514001
001DF2 5860 D0A4              000A4  2657          L     R6,PRPT              LOAD PROGRAM PTR        02515001
001DF6 9160 D081        00081        2658          TM    COMPFLGS+1,NLOAD+NDECK NOLOAD AND NODECK ?   02516001
001DFA 4710 BE0E              01E0E  2659          BO    TXTLE2               YES, BRANCH             02517001
001DFE 45E0 BE14              01E14  2660          BAL   R14,GENTXT           OUTPUT OF TEXT          02518001
001E02 0000                          2661 TXTLE    DC    H'0'                 INSERT LENGTH OF TEXT   02519001
001E04 5060 D0A4              000A4  2662 TXTLE1   ST    R6,PRPT              STORE PROGRAM PTR       02520001
001E08 98E6 BF1C              01F1C  2663          LM    R14,R6,TXTSAV        RESTORE REGS            02521001
001E0C 07FE                          2664          BR    R14                  RETURN                  02522001
                                     2665 *                                                           02523001
001E0E 1A65                          2666 TXTLE2   AR    R6,R5                UPDATE PROGRAM PTR      02524001
001E10 47F0 BE04              01E04  2667          B     TXTLE1                                       02525001
                                     2668 *                                                           02526001
                                     2669 *        GENERATE TXT RECORDS                               02527001
                                     2670 *                                                           02528001
001E14 4140 E002              00002  2671 GENTXT   LA    R4,2(,R14)           COMPUTE RETURN ADDR     02529001
001E18 48E0 E000              00000  2672          LH    R14,0(,R14)          LOAD LENGTH GIVEN IN CALL 02530001
001E1C 4130 BEF4              01EF4  2673          LA    R3,TXTT              INDICATE TXT CALL       02531001
001E20 5810 D0A8              000A8  2674          L     R1,SAVOUTA           LOAD ADDR OF OUT RECORD 02532001
001E24 D502 1001 3001 00001 00001  2675          CLC   1(3,R1),1(R3)        RECORD RIGHT TYPE ?     02533001
001E2A 4770 BE5E              01E5E  2676          BNE   GEN3                 NO, CALL IOR NEW        02534001
001E2E D501 100A 300C 0000A 0000C  2677          CLC   10(2,R1),12(R3)      RECORD FILLED ?         02535001
001E34 47B0 BE5E              01E5E  2678          BNL   GEN3                 YES, CALL FOR NEW       02536001
001E38 41F0 0038              00038  2679 GEN6     LA    R15,56                                       02537001
001E3C 4800 100A              0000A  2680          LH    R0,10(,R1)           R0 = LENGTH OF DATA IN REC 02538001
001E40 1BF0                          2681          SR    R15,R0               R15 = EMPTY POS LEFT IN RECORD 02539001
001E42 19FE                          2682          CR    R15,R14              ENOUGH SPACE LEFT ?     02540001
001E44 4740 BE4A              01E4A  2683          BL    GEN6A                NO                      02541001
001E48 18FE                          2684          LR    R15,R14              YES, R15 = LENGTH FROM CALL 02542001
001E4A 1AF0                          2685 GEN6A    AR    R15,R0                                       02543001
001E4C 40F0 100A              0000A  2686          STH   R15,10(,R1)          INSERT NEW LENGTH INTO RECORD 02544001
001E50 1BF0                          2687          SR    R15,R0                                       02545001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

001E52 1A10                          2688          AR    R1,R0                    START ADDR WITHIN RECORD        02546001
001E54 1BEF                          2689          SR    R14,R15                  REMAINING LENGTH                02547001
001E56 47F0 BF02              01F02  2690          B     GEN8                     GOTO MOVE TEXT                  02548001
                                     2691 *                                                                       02549001
001E5A 12EE                          2692 GEN4     LTR   R14,R14                  MORE INFORMATION TO BE MOVED ?  02550001
001E5C 0784                          2693          BZR   R4                       NO, RETURN TO CALLING ROUTINE   02551001
                                     2694 *                                                                       02552001
                                     2695 *        OUTPUT NEW RECORD                                              02553001
                                     2696 *                                                                       02554001
001E5E 50E0 BE90              01E90  2697 GEN3     ST    R14,SAVELT               SAVE LENGTH                     02555001
001E62 9160 D081        00081        2698          TM    COMPFLGS+1,NLOAD+NDECK   BOTH DECK AND LOAD SPECIFIED ?  02556001
001E66 4780 BE94              01E94  2699          BZ    BOTH                     YES, BRANCH                     02557001
001E6A 9120 D081        00081        2700          TM    COMPFLGS+1,NDECK         ONLY DECK ?                     02558001
001E6E 5810 D060              00060  2701          L     R1,APCHDCB               R1 -> SYSPUNCH DCB              02559001
001E72 4780 BE7A              01E7A  2702          BZ    PUT1                     YES                             02560001
001E76 5810 D048              00048  2703 PUT1A    L     R1,ALINDCB               R1 -> SYSLIN DCB                02561001
                                     2704 *                                                                       02562001
                                     2705 PUT1     PUT   (R1)                     PUT FOR SYSLIN AND SYSPUNCH     02563001
001E7A 1811                          2706+PUT1     LR    1,R1                               LOAD PARAMETER REG 1  02-IHBIN
001E7C 58F0 1030              00030  2707+         L     15,48(0,1)                LOAD PUT ROUTINE ADDR          01-PUT
001E80 05EF                          2708+         BALR  14,15                     LINK TO PUT ROUTINE            01-PUT
                                     2709 *                                                                       02564001
001E82 5010 D0A8              000A8  2710          ST    R1,SAVOUTA               IF ONLY SYSPUNCH SPECIFIED      02565001
001E86 58E0 BE90              01E90  2711          L     R14,SAVELT               RESTORE LENGTH                  02566001
001E8A 47F0 BEB6              01EB6  2712          B     PUNCHOUT                                                 02567001
                                     2713 *                                                                       02568001
001E8E 0000
001E90 00000000                      2714 SAVELT   DC    F'0'                     SAVE AREA FOR LENGTH            02569001
001E94 58E0 D0AC              000AC  2715 BOTH     L     R14,OUTAREA2             COPY SYSLIN BUFFER TO SYSPUNCH  02570001
001E98 5810 D0A8              000A8  2716          L     R1,SAVOUTA                                               02571001
001E9C D24F E000 1000 00000 00000    2717          MVC   0(80,R14),0(R1)          BUFFER                          02572001
001EA2 5810 D060              00060  2718          L     R1,APCHDCB                                               02573001
                                     2719 *                                                                       02574001
                                     2720          PUT   (R1)                     PUT FOR SYSPUNCH WHEN BOTH HAS  02575001
001EA6 1811                          2721+         LR    1,R1                               LOAD PARAMETER REG 1  02-IHBIN
001EA8 58F0 1030              00030  2722+         L     15,48(0,1)                LOAD PUT ROUTINE ADDR          01-PUT
001EAC 05EF                          2723+         BALR  14,15                     LINK TO PUT ROUTINE            01-PUT
                                     2724 *                                                                       02576001
001EAE 5010 D0AC              000AC  2725          ST    R1,OUTAREA2              BEEN SPECIFIED                  02577001
001EB2 47F0 BE76              01E76  2726          B     PUT1A                    GOTO PUT SYSLIN                 02578001
                                     2727 *                                                                       02579001
                        01EB6        2728 PUNCHOUT EQU   *                                                        02580001
001EB6 D203 1000 3000 00000 00000    2729          MVC   0(4,R1),0(R3)            INSERT FIRST 4 BYTES            02581001
001EBC 9240 1004        00004        2730          MVI   4(R1),C' '               INSERT ONE BLANK                02582001
001EC0 D242 1005 1004 00005 00004    2731          MVC   5(67,R1),4(R1)           BLANK OUTPUT RECORD             02583001
001EC6 D203 1048 D0B0 00048 000B0    2732          MVC   72(4,R1),PIDENT          INSERT PROGRAM IDENT            02584001
001ECC FA30 D0B4 BF40 000B4 01F40    2733          AP    CARDCNT,KP1              STEP SEQUENCE NUMBER            02585001
001ED2 F333 104C D0B4 0004C 000B4    2734          UNPK  76(4,R1),CARDCNT         UNPACK INTO RECORD              02586001
001ED8 96F0 104F        0004F        2735          OI    79(R1),X'F0'             MAKE PRINTABLE                  02587001
001EDC D201 100A 3004 0000A 00004    2736          MVC   10(2,R1),4(R3)           INSERT INITIAL LENGTH           02588001
001EE2 D205 100E 3006 0000E 00006    2737          MVC   14(6,R1),6(R3)           INSERT ESID+R AND P             02589001
001EE8 5060 1004              00004  2738          ST    R6,4(0,R1)                                               02590001
001EEC 9240 1004        00004        2739          MVI   4(R1),C' '                                               02591001
001EF0 47F0 BE38              01E38  2740          B     GEN6                                                     02592001
                                     2741 *                                                                       02593001
                                     2742 *        TXT RECORD                                                     02594001
                                     2743 *                                                                       02595001
001EF4 02                            2744 TXTT     DC    X'02'                    CARD CODE                       02596001
001EF5 E3E7E3                        2745          DC    C'TXT'                   IDENTIFICATION                  02597001
001EF8 0000                          2746          DC    H'0'                     INITIAL LENGTH 0                02598001
001EFA 0001                          2747          DC    H'1'                     ESID                            02599001
001EFC 40404040                      2748          DC    C'    '                                                  02600001
001F00 0038                          2749          DC    H'56'                    MAXIMUM LENGTH                  02601001
                                     2750 *                                                                       02602001
                                     2751 *        TXT MOVE ROUTINE                                               02603001
                                     2752 *                                                                       02604001
001F02 06F0                          2753 GEN8     BCTR  R15,0                    DECR R15                        02605001
001F04 42F0 BF09              01F09  2754          STC   R15,*+5                  INSERT PROPER LENGTH TO MOVE    02606001
001F08 D200 1010 2000 00010 00000    2755          MVC   16(0,R1),0(R2)           MOVE DATA TO OUT AREA           02607001
001F0E 416F 6001              00001  2756          LA    R6,1(R15,R6)             INCREASE PROGRAM POINTER        02608001
001F12 412F 2001              00001  2757          LA    R2,1(R15,R2)             MODIFY DATA ADDR                02609001
001F16 47F0 BE5A              01E5A  2758          B     GEN4                     OUT OF MOVE TXT ROUTINE         02610001
                                     2759 *                                                                       02611001
                                     2760 *        AREAS AND CONSTANTS LOCAL FOR GENTXT                           02612001
                                     2761 *                                                                       02613001
001F1A 0000
001F1C 0000000000000000              2762 TXTSAV   DC    9F'0'                    REGISTER SAVE AREA              02614001
001F40 1C                            2763 KP1      DC    PL1'1'                   CARD COUNT INCREMENT            02615001
                                     2764 *                                                                       02616001
001F41 00
001F42 950C 1007        00007        2765 INTERUPT CLI   7(R1),X'0C'              FLOATING POINT OVERFLOW ?       02617001
001F46 4780 BB36              01B36  2766          BE    REALERR                  YES                             02618001
001F4A 5850 C160              02160  2767          L     R5,OLDSPIE               NO, USE DIRECTORY ROUTINE       02619001
001F4E 58F0 5000              00000  2768          L     R15,0(,R5)               ADDR ERROR ROUTINE OF DIREC     02620001
001F52 07FF                          2769          BR    R15                      ENTER ERROR ROUTINE             02621001
                                     2770 *                                                                       02622001
001F54 000000000000                  2771 ZERO     DC    3H'0'                                                    02623001
001F5A 0001                          2772 KH1      DC    H'1'                                                     02624001
001F5C 0005                          2773 KH5      DC    H'5'                                                     02625001
001F5E 0007                          2774 KH7      DC    H'7'                                                     02626001
001F60 0008                          2775 KH8      DC    H'8'                                                     02627001
001F62 0009                          2776 KH9      DC    H'9'                                                     02628001
001F64 000A                          2777 KH10     DC    H'10'                                                    02629001
001F66 000B                          2778 KH11     DC    H'11'                                                    02630001
001F68 000C                          2779 KH12     DC    H'12'                                                    02631001
001F6A 000F                          2780 KH15     DC    H'15'                                                    02632001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

001F6C 0012                        2781 KH18      DC     H'18'                                                  02633001
001F6E 0038                        2782 KH56      DC     H'56'                                                  02634001
001F70 0040                        2783 KH64      DC     H'64'                                                  02635001
001F72 00FF                        2784 KH255     DC     H'255'                                                 02636001
001F74 0700                        2785 KH1792    DC     H'1792'                                                02637001
001F76 1000                        2786 KH4096    DC     H'4096'                                                02638001
                                   2787 *                                                                       02639001
                                   2788 *         ERROR MESSAGE NUMBERS                                         02640001
                                   2789 *                                                                       02641001
001F78 0050                        2790 INVOP     DC     H'80'                SYNTAX ERROR IN OPERAND           02642001
001F7A 0051                        2791 UNDEFOP   DC     H'81'                UNDEFINED IDENTIFIER              02643001
001F7C 0052                        2792 RANGEREA  DC     H'82'                REAL CONSTANT OUT OF RANGE        02644001
001F7E 0053                        2793 RANGEINT  DC     H'83'                INTEGER OUT OF RANGE              02645001
001F80 0054                        2794 PRECREAL  DC     H'84'                PRECISION OF REAL TOO GREAT       02646001
001F82 0055                        2795 GOTOFOR   DC     H'85'                GO TO INTO FOR STATEMENT          02647001
001F84 0056                        2796 MANYCON   DC     H'86'                TOO MANY CONSTANTS                02648001
001F86 0057                        2797 TABOVER   DC     H'87'                OPTIMIZATION TABLE OVERFLOW       02649001
001F88 0058                        2798 ARRAYERR  DC     H'88'                INVALID ARRAY LIST IDENTIFIER     02650001
001F8A 0059                        2799 SWITCHER  DC     H'89'                SWITCH DECLARATION ERROR          02651001
001F8C 00D5                        2800 ITABOVER  DC     H'213'               ITAB OVERFLOW                     02652001
                      000D4        2801 TOOMANY   EQU    212                  TOO MANY ERRORS                   02653001
001F8E 00D7                        2802 TOOLONG   DC     H'215'               TOO MUCH SOURCE OUTPUT            02654001
                                   2803 *                                                                       02655001
                                   2804 *         SUBSCRIPT TABLE                                               02656001
                                   2805 *                                                                       02657001
001F90 00000000                    2806 ZSUTAPO   DC     A(0)                 CURRENT SUTAB PT                  02658001
001F94 00000000                    2807 ZSUDAD    DC     A(0)                 ADDR OF FIRST SUTAB ENTRY         02659001
001F98 00000000                    2808 ZSUTMAX   DC     A(0)                 SUTAB END PT                      02660001
001F9C 00000000                    2809 SUSTRT    DC     A(0)                 START ADDR OF SUTAB RECORD        02661001
001FA0 E2E4E3C2                    2810 SUKEY     DC     C'SUTB'              SUTAB RECORD IDENTIFICATION       02662001
001FA4 00000000                    2811 SULENGTH  DC     F'0'                 ACCUMULATED LENGTH OF SUTAB       02663001
001FA8 0000                        2812 SUCNT     DC     H'0'                 NUMBER OF WRITTEN SUTAB RECORDS   02664001
                                   2813 *                                                                       02665001
                                   2814 *         LEFT VARIABLE TABLE                                           02666001
                                   2815 *                                                                       02667001
001FAA 0000
001FAC 00000000                    2816 ZLESTA    DC     A(0)                 ADDR OF FIRST LVTAB ENTRY         02668001
001FB0 00000000                    2817 ZLEVA     DC     A(0)                 CURRENT LVTAB PT                  02669001
001FB4 00000000                    2818 ZLEMAX    DC     A(0)                 LVTAB END PT                      02670001
001FB8 00000000                    2819 LVSTRT    DC     A(0)                 START ADDR OF LVTAB RECORD        02671001
001FBC D3E5E3C2                    2820 LVKEY     DC     C'LVTB'              LVTAB RECORD IDENTIFICATION       02672001
001FC0 00000000                    2821 LVLENGTH  DC     F'0'                 ACCUMULATED LENGTH OF LVTAB       02673001
001FC4 0000                        2822 LVCNT     DC     H'0'                 NUMBER OF WRITTEN LVTAB RECORDS   02674001
                                   2823 *                                                                       02675001
                                   2824 *         INPUT RECORD                                                  02676001
                                   2825 *                                                                       02677001
001FC6 0000
001FC8 00000000                    2826 ZIBRUN    DC     A(0)                 START OF ACTIVE INPUT BUF         02678001
001FCC 00000000                    2827 ZIBREAD   DC     A(0)                 START OF NEXT INPUT BUFFER        02679001
                                   2828 *                                                                       02680001
                                   2829 *         OUTPUT RECORD                                                 02681001
                                   2830 *                                                                       02682001
001FD0 00000000                    2831 ZOBWORK   DC     A(0)                 START OF ACTIVE OUTPUT BUFFER     02683001
001FD4 00000000                    2832 ZOBWRITE  DC     A(0)                 START OF LAST OUTPUT BUFFER       02684001
001FD8 00000000                    2833 ZFILE1    DC     A(0)                 OUTPUT RECORD END - 1             02685001
001FDC 00000000                    2834 ZFILE2    DC     A(0)                 OUTPUT RECORD END - 2             02686001
001FE0 00000000                    2835 ZFILE3    DC     A(0)                 OUTPUT RECORD END - 3             02687001
001FE4 00000000                    2836 ZFILE5    DC     A(0)                 OUTPUT RECORD END - 5             02688001
001FE8 00000000                    2837 ZFILE6    DC     A(0)                 OUTPUT RECORD END - 6             02689001
001FEC 00000000                    2838 ZFILE9    DC     A(0)                 OUTPUT RECORD END - 9             02690001
001FF0 0001                        2839 ZOUTCOT   DC     H'1'                 OUTPUT RECORD NUMBER              02691001
                                   2840 *                                                                       02692001
                                   2841 *         IDENTIFIER TABLE                                              02693001
                                   2842 *                                                                       02694001
001FF2 0000
001FF4 00000000                    2843 ZIBSTAO   DC     A(0)                 ITAB START ADDR                   02695001
001FF8 00000000                    2844 ZITAN     DC     A(0)                 ADDR OF ITAB ENTRY OF LAST ID     02696001
001FFC 00000000                    2845 ZCURITEN  DC     A(0)                 ADDR OF LAST ITAB ENTRY           02697001
002000 00000000                    2846 ZITREC    DC     A(0)                 START OF NEXT ITAB RECORD         02698001
002004 00000000                    2847 ZITEND    DC     A(0)                 ITAB END ADDR                     02699001
002008 0000                        2848 ZCURITLE  DC     H'0'                 LENGTH OF LAST ITAB RECORD        02700001
                                   2849 *                                                                       02701001
                                   2850 *         ERROR MESSAGES                                                02702001
                                   2851 *                                                                       02703001
00200A 0000
00200C 00000000                    2852 ZBEGERR   DC     F'0'                 START OF VARIABLE INFORMATION     02704001
002010 00000000                    2853 ZENDERR   DC     F'0'                 END OF VARIABLE INFORMATION       02705001
002014 0000                        2854 ZERRONU   DC     H'0'                 ERROR NUMBER                      02706001
                                   2855 *                                                                       02707001
                                   2856 *         ARRAY IDENTIFIER STACK                                        02708001
                                   2857 *                                                                       02709001
002016 0000
002018 00002042                    2858 ZARMAX    DC     A(ZARSTACK+28)       END ADDR IN ARIDSTACK             02710001
00201C 0000201F                    2859 ZARNO     DC     A(ZARSTACK-7)        START ADDR OF ARIDSTACK           02711001
002020 0000201F                    2860 ZARSPO    DC     A(ZARSTACK-7)        CURRENT POINT IN ARIDSTACK        02712001
002024 0000                        2861 ZPOSIX    DC     H'0'                 COMPONENT NUMBER IN ARRAY         02713001
002026 0000000000000000            2862 ZARSTACK  DC     XL35'00'             ARIDSTACK                         02714001
                                   2863 *                                                                       02715001
                                   2864 *         SUBSCRIPT TEST ROUTIN2                                        02716001
                                   2865 *                                                                       02717001
002049 000000
00204C 00000000                    2866 SUBEND    DC     A(0)                 SUBSCRIPT END ADDR                02718001
002050 000000000000                2867 ADDEND    DC     3H'0'                SAVE AREA FOR ADDEND              02719001
002056 000000000000                2868 FACTOR    DC     3H'0'                SAVE AREA FOR FACTOR              02720001
00205C 00C801000000                2869 ZEROELEM  DC     XL6'00C801000000'    INTERNAL CODE FOR +0              02721001
002062 00C801000004                2870 ONEELEM   DC     XL6'00C801000004'    INTERNAL CODE FOR +1              02722001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

002068 00000000                    2871 ZBRACK   DC    A(0)                   SUBSCRIPT START ADDR - 1         02723001
                                   2872 *                                                                      02724001
00206C 00000000                    2873 ZSTO     DC    F'0'                   TEMPORARY STORAGE                02725001
002070 0670                        2874 ZSTO1    DC    X'0670'                                                 02726001
002072 0240                        2875 ZSTO2    DC    X'0240'                                                 02727001
002074 0000                        2876 ZIGN     DC    H'0'                   CURRENT IDENTIFIER GROUP NUMBER  02728001
002076 3E3E3E3E3E3E                2877 ZPOINT   DC    6AL1(XFDECPT)                                           02729001
00207C 91FF010000                  2878 ZALLPUP  DC    X'91FF010000'          ALL PURPOSE IDENTIFIER           02730001
                     02076         2879 ZALLPU   EQU   ZALLPUP-6                                               02731001
002081 0000000000000000            2880 ZIDEX    DC    37X'00'                WORKAREA                         02732001
                     02082         2881 NUMBER   EQU   ZIDEX+1                                                 02733001
0020A6 0000
0020A8 00002081                    2882 OPSTART  DC    A(ZIDEX)                                                02734001
                                   2883 *                                                                      02735001
0020AC 0000                        2884 BRCNT    DC    H'0'                   BRACKET COUNTER IN ARRAY DECL    02736001
0020AE 00                          2885 STATUS   DC    X'00'                  STATUS BYTE                      02737001
0020AF 40                          2886 CURPBN   DC    C' '                   PBN OF LAST BLOCK                02738001
0020B0 00                          2887 ZCLOBRA  DC    X'00'                  SUBSCRIPT TEST BYTE              02739001
0020B1 00                          2888 ZFORTEST DC    X'00'                  FOR STATEMENT TEST BYTE          02740001
0020B2 00                          2889 ZLVOV    DC    X'00'                  SET X'FF' IF NO MORE SUBSC OPT   02741001
0020B3 40                          2890 ZFSN     DC    C' '                   CURRENT FOR STATEMENT NUMBER     02742001
0020B4 40                          2891 FSNEMBR  DC    C' '                   NUMBER OR EMBRACING BLOCK        02743001
0020B5 40                          2892 IOBYTE   DC    C' '                   STATUS BYTE FOR SYSUT3           02744001
0020B6 0000
0020B8 00000000                    2893 NOTEW    DC    F'0'                   ID OF LAST WRITTEN RECORD        02745001
0020BC 00000000                    2894 NOTER    DC    F'0'                   ID OF LAST READ ITAB RECORD      02746001
                                   2895 *                                                                      02747001
                                   2896 *        CRITICAL VARIABLE TABLE                                       02748001
                                   2897 *                                                                      02749001
0020C0 00000000                    2898 PFA      DC    A(0)                   CURRENT CRIDTAB PT               02750001
0020C4 00000000                    2899 PFANO    DC    A(0)                   START ADDR OF CRIDTAB            02751001
0020C8 00000000                    2900 PFAMAX   DC    A(0)                   END ADDR OF CRIDTAB              02752001
0020CC 00000000                    2901 ZFSPTR   DC    A(0)                   POINT TO CURRENT FSTAB ENTRY     02753001
0020D0 00000000                    2902 ZFOCRI   DC    A(0)                                                    02754001
                                   2903 *                                                                      02755001
                                   2904 *        CONSTANT POOL                                                 02756001
                                   2905 *                                                                      02757001
0020D4 00000000                    2906 ZKOPOOL  DC    A(0)                   START ADDR OF POOL               02758001
0020D8 00000000                    2907 ZKOPEND  DC    A(0)                   END ADDR OF POOL                 02759001
0020DC 00000000                    2908 ZLITSTA  DC    A(0)                   START ADDR OF USED PART          02760001
0020E0 00000000                    2909 ZTEXTCO  DC    A(0)                   END ADDR OF TXT PIECE            02761001
0020E4 0000                        2910 ZKBNMAX  DC    H'0'                   NUMBER OF NEXT POOL              02762001
0020E6 0038                        2911 TXTPUT   DC    H'56'                  LENGTH OF TXT PIECE              02763001
                                   2912 *                                                                      02764001
0020E8 0000000000000000            2913 ZPACK    DC    D'0'                   WORKAREA TO PACK NUMBERS         02765001
0020F0 0000000000000000            2914 ZEROFLOA DC    D'0.0'                                                  02766001
0020F8 4110000000000000            2915 ZONEFLOA DC    D'1.0'                                                  02767001
002100 483B9ACA00000000            2916 ZTEN9    DC    D'1.0E+9'                                               02768001
002108 4E00000000000000            2917 ZFLOFIEL DC    X'4E00000000000000'    WORKAREA FOR FLOATING CONVERS    02769001
002110 0000000080000000            2918 ROUND    DC    X'0000000080000000'    USED TO ROUND SHORT FORM REAL    02770001
002118 00000000                    2919 ZWP      DC    A(0)                   WORD POINTT IN CONSTANT POOL     02771001
00211C 00000000                    2920 ZDWP     DC    A(0)                   DOUBLE WORD PT IN CONSTANT POOL  02772001
002120 00002082                    2921 NSTART   DC    A(NUMBER)              PTR TO NUMBER                    02773001
002124 00000038                    2922 SCALEMSK DC    XL4'38'                                                 02774001
002128 00000008                    2923 LREAL    DC    F'8'                   SHORT PREC 4, LONG PREC 8        02775001
00212C 00000012                    2924 NREAL    DC    F'18'                  SHORT PREC 7, LONG PREC 18       02776001
002130 0000                        2925 ZLIRE    DC    H'0'                                                    02777001
002132 C801                        2926 ZINTYP   DC    X'C801'                ID OF INTEGER CONSTANT           02778001
002134 C802                        2927 ZREALTYP DC    X'C802'                ID OF REAL CONSTANT              02779001
002136 1C                          2928 SREF     DC    P'+1'                  PLUS                             02780001
002137 1D                          2929          DC    P'-1'                  MINUS, MUST FOLLOW SREF          02781001
002138 40                          2930 SCATEST  DC    C' '                   SCALE FACTOR TEST BYTE           02782001
002139 2E00                        2931 SCALEQ   DC    AL1(XFQUOTE),X'00'                                      02783001
                     0213A         2932 SCALE    EQU   SCALEQ+1                                                02784001
                                   2933 MAXINT   IEXCGEN DC,'2147483647'      MAX INTEGER IN INTERNAL CODE     02785001
00213B 3231343734383336            2934+MAXINT   DC    X'32313437343833363437'                                 01-IEXCG
002145 0000000000000000            2935 SCAWORK  DC    10X'00'                STORE FOR SCALE FACTOR           02786001
00214F 00
002150 00000000                    2936 ZTO      DC    F'0'                                                    02787001
002154 00000000                    2937 ZEXCORR  DC    F'0'                                                    02788001
002158 00000000                    2938 ZTOSCA   DC    F'0'                                                    02789001
00215C 00002146                    2939 SCAWORKA DC    A(SCAWORK+1)                                            02790001
                                   2940 *                                                                      02791001
002160 00000000                    2941 OLDSPIE  DC    A(0)                   ADDR OF OLD PICA                 02792001
002164 00000000                    2942 TABSIZE  DC    F'0'                   ACCUMULATED SIZE OF TABLES       02793001
002168 0000000000000000            2943 REGSAVE  DC    5F'0'                  SAVEAREA FOR REGISTERS           02794001
00217C 00000006                    2944 SPECUSE  DC    XL4'06'                                                 02795001
002180 00000000                    2945 ALIGN    DC    F'0'                   FULL WORD ALIGNMENT              02796001
                     02182         2946 ALIGNH   EQU   ALIGN+2                HALF WORD ALIGNMENT              02797001
                                   2947 *                                                                      02798001
002184 00000000
002188 41A0000000000000            2948 ZEXTABP  DC    D'1.0E+1'                                               02799001
002190 4264000000000000            2949          DC    D'1.0E+2'                                               02800001
002198 433E800000000000            2950          DC    D'1.0E+3'                                               02801001
0021A0 4427100000000000            2951          DC    D'1.0E+4'                                               02802001
0021A8 45186A0000000000            2952          DC    D'1.0E+5'                                               02803001
0021B0 45F4240000000000            2953          DC    D'1.0E+6'                                               02804001
0021B8 4698968000000000            2954          DC    D'1.0E+7'                                               02805001
0021C0 475F5E1000000000            2955          DC    D'1.0E+8'                                               02806001
0021C8 4E2386F26FC10000            2956          DC    D'1.0E+16'                                              02807001
0021D0 54D3C21BCECCEDA1            2957          DC    D'1.0E+24'                                              02808001
0021D8 5B4EE2D6D415B85B            2958          DC    D'1.0E+32'                                              02809001
0021E0 621D6329F1C35CA5            2959          DC    D'1.0E+40'                                              02810001
0021E8 68AF298D050E4396            2960          DC    D'1.0E+48'                                              02811001
0021F0 6F4140C78940F6A2            2961          DC    D'1.0E+56'                                              02812001
0021F8 76184F03E93FF9F5            2962          DC    D'1.0E+64'                                              02813001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                   2963 *                                                                         02814001
002200 401999999999999A            2964 ZEXTABN  DC    D'1.0E-1'                                                  02815001
002208 3F28F5C28F5C28F6            2965          DC    D'1.0E-2'                                                  02816001
002210 3E4189374BC6A7F0            2966          DC    D'1.0E-3'                                                  02817001
002218 3D68DB8BAC710CB3            2967          DC    D'1.0E-4'                                                  02818001
002220 3CA7C5AC471B4784            2968          DC    D'1.0E-5'                                                  02819001
002228 3C10C6F7A0B5ED8D            2969          DC    D'1.0E-6'                                                  02820001
002230 3B1AD7F29ABCAF48            2970          DC    D'1.0E-7'                                                  02821001
002238 3A2AF31DC4611874            2971          DC    D'1.0E-8'                                                  02822001
002240 33734ACA5F6226F1            2972          DC    D'1.0E-16'                                                 02823001
002248 2D1357C299A88EA7            2973          DC    D'1.0E-24'                                                 02824001
002250 2633EC47AB514E65            2974          DC    D'1.0E-32'                                                 02825001
002258 1F8B61313BBABCE3            2975          DC    D'1.0E-40'                                                 02826001
002260 1917624F8A762FD8            2976          DC    D'1.0E-48'                                                 02827001
002268 123EC56164AF81A3            2977          DC    D'1.0E-56'                                                 02828001
002270 0BA87FEA27A539EA            2978          DC    D'1.0E-64'                                                 02829001
                                   2979 *                                                                         02830001
002278 5454546854685454            2980 GENER    DC    X'5454546854685454'                                        02831001
002280 3C606438541C2020            2981          DC    X'3C606438541C2020'                                        02832001
002288 5454545454545454            2982          DC    8X'54'                                                     02833001
002290 245C543430                  2983          DC    X'245C543430'                                              02834001
002295 5454545454545454            2984          DC    8X'54'                                                     02835001
00229D 4054544438282C54            2985          DC    X'4054544438282C545018480C'                                02836001
0022A9 0808080808080808            2986          DC    9X'08'                                                     02837001
0022B2 00004C581014                2987          DC    X'00004C581014'                                            02838001
0022B8 0404040404040404            2988          DC    30X'04'                                                    02839001
                                   2989 *                                                                         02840001
0022D6 1010101010101010            2990 IDENTI   DC    45X'10'                                                    02841001
002303 000C04                      2991          DC    X'000C04'                                                  02842001
002306 0000000000000000            2992          DC    13X'00'                                                    02843001
002313 080C0C                      2993          DC    X'080C0C'                                                  02844001
002316 0000000000000000            2994          DC    30X'00'                                                    02845001
                                   2995 *                                                                         02846001
002334 1818181818181818            2996 DIG19    DC    45X'18'                                                    02847001
002361 000C10                      2997          DC    X'000C10'                                                  02848001
002364 0000000000000000            2998          DC    13X'00'                                                    02849001
002371 140408                      2999          DC    X'140408'                                                  02850001
002374 0C0C0C0C0C0C0C0C            3000          DC    30X'0C'                                                    02851001
                                   3001 *                                                                         02852001
002392 1C1C1C1C1C1C1C1C            3002 DIG0     DC    45X'1C'                                                    02853001
0023BF 00081400                    3003          DC    X'00081400'                                                02854001
0023C3 0404040404040404            3004          DC    9X'04'                                                     02855001
0023CC 000000180C10                3005          DC    X'000000180C10'                                            02856001
0023D2 0808080808080808            3006          DC    30X'08'                                                    02857001
                                   3007 *                                                                         02858001
0023F0 1414141414141414            3008 DECPO    DC    45X'14'                                                    02859001
00241D 00081004                    3009          DC    X'00081004'                                                02860001
002421 0000000000000000            3010          DC    13X'00'                                                    02861001
00242E 080C                        3011          DC    X'080C'                                                    02862001
002430 0808080808080808            3012          DC    30X'08'                                                    02863001
                                   3013 *                                                                         02864001
00244E 0C0C                        3014 SCAFAC   DC    X'0C0C'                                                    02865001
002450 1818181818181818            3015          DC    43X'18'                                                    02866001
00247B 00101408                    3016          DC    X'00101408'                                                02867001
00247F 0404040404040404            3017          DC    9X'04'                                                     02868001
002488 00000000                    3018          DC    4X'00'                                                     02869001
00248C 1010101010101010            3019          DC    32X'10'                                                    02870001
                                   3020 *                                                                         02871001
                                   3021 *        ITAB ENTRIES FOR STANDARD PROCEDURES                             02872001
                                   3022 *                                                                         02873001
0024AC 013F0000002B                3023 FIXITAB  DC    X'013F0000002B'         HEADER FOR PBN O                   02874001
0024B2 0000000000                  3024          DC    X'0000',X'000000'                                          02875001
                                   3025 *                                                                         02876001
0024B7 000000000000                3026          DC    XL6'00'                                                    02877001
0024BD               024BD 024B7   3027          ORG   *-6                                                        02878001
                                   3028          IEXCGEN DC,'ABS'              ABS                                02879001
0024B7 404152                      3029+         DC    X'404152'                                                  01-IEXCG
0024BA               024BA 024BD   3030          ORG                                                              02880001
0024BD 8882002080                  3031          DC    X'8882',X'002080'                                          02881001
                                   3032 *                                                                         02882001
0024C2 000000000000                3033          DC    XL6'00'                                                    02883001
0024C8               024C8 024C2   3034          ORG   *-6                                                        02884001
                                   3035          IEXCGEN DC,'SIGN'             SIGN                               02885001
0024C2 5248464D                    3036+         DC    X'5248464D'                                                01-IEXCG
0024C6               024C6 024C8   3037          ORG                                                              02886001
0024C8 88810020C0                  3038          DC    X'8881',X'0020C0'                                          02887001
                                   3039 *                                                                         02888001
0024CD 000000000000                3040          DC    XL6'00'                                                    02889001
0024D3               024D3 024CD   3041          ORG   *-6                                                        02890001
                                   3042          IEXCGEN DC,'LENGTH'           LENGTH                             02891001
0024CD 4B444D465347                3043+         DC    X'4B444D465347'                                            01-IEXCG
0024D3               024D3 024D3   3044          ORG                                                              02892001
0024D3 88810000E0                  3045          DC    X'8881',X'0000E0'                                          02893001
                                   3046 *                                                                         02894001
0024D8 000000000000                3047          DC    XL6'00'                                                    02895001
0024DE               024DE 024D8   3048          ORG   *-6                                                        02896001
                                   3049          IEXCGEN DC,'SYSACT'           SYSACT                             02897001
0024D8 525852404253                3050+         DC    X'525852404253'                                            01-IEXCG
0024DE               024DE 024DE   3051          ORG                                                              02898001
0024DE 8A80911203                  3052          DC    X'8A80',X'911203'                                          02899001
                                   3053 *                                                                         02900001
0024E3 000000000000                3054          DC    XL6'00'                                                    02901001
0024E9               024E9 024E3   3055          ORG   *-6                                                        02902001
                                   3056          IEXCGEN DC,'SQRT'             SQRT                               02903001
0024E3 52505153                    3057+         DC    X'52505153'                                                01-IEXCG
0024E7               024E7 024E9   3058          ORG                                                              02904001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0024E9 8882002004                  3059          DC    X'8882',X'002004'                                      02905001
                                   3060 *                                                                     02906001
0024EE 000000000000                3061          DC    XL6'00'                                                02907001
0024F4                024F4 024EE  3062          ORG   *-6                                                    02908001
                                   3063          IEXCGEN DC,'SIN'            SIN                              02909001
0024EE 52484D                      3064+         DC    X'52484D'                                              01-IEXCG
0024F1                024F1 024F4  3065          ORG                                                          02910001
0024F4 8882002008                  3066          DC    X'8882',X'002008'                                      02911001
                                   3067 *                                                                     02912001
0024F9 000000000000                3068          DC    XL6'00'                                                02913001
0024FF                024FF 024F9  3069          ORG   *-6                                                    02914001
                                   3070          IEXCGEN DC,'COS'            COS                              02915001
0024F9 424E52                      3071+         DC    X'424E52'                                              01-IEXCG
0024FC                024FC 024FF  3072          ORG                                                          02916001
0024FF 888200200C                  3073          DC    X'8882',X'00200C'                                      02917001
                                   3074 *                                                                     02918001
002504 000000000000                3075          DC    XL6'00'                                                02919001
00250A                0250A 02504  3076          ORG   *-6                                                    02920001
                                   3077          IEXCGEN DC,'ARCTAN'         ARCTAN                           02921001
002504 40514253404D                3078+         DC    X'40514253404D'                                        01-IEXCG
00250A                0250A 0250A  3079          ORG                                                          02922001
00250A 8882002010                  3080          DC    X'8882',X'002010'                                      02923001
                                   3081 *                                                                     02924001
00250F 000000000000                3082          DC    XL6'00'                                                02925001
002515                02515 0250F  3083          ORG   *-6                                                    02926001
                                   3084          IEXCGEN DC,'LN'             LN                               02927001
00250F 4B4D                        3085+         DC    X'4B4D'                                                01-IEXCG
002511                02511 02515  3086          ORG                                                          02928001
002515 8882002014                  3087          DC    X'8882',X'002014'                                      02929001
                                   3088 *                                                                     02930001
00251A 000000000000                3089          DC    XL6'00'                                                02931001
002520                02520 0251A  3090          ORG   *-6                                                    02932001
                                   3091          IEXCGEN DC,'EXP'            EXP                              02933001
00251A 44574F                      3092+         DC    X'44574F'                                              01-IEXCG
00251D                0251D 02520  3093          ORG                                                          02934001
002520 8882002018                  3094          DC    X'8882',X'002018'                                      02935001
                                   3095 *                                                                     02936001
002525 000000000000                3096          DC    XL6'00'                                                02937001
00252B                0252B 02525  3097          ORG   *-6                                                    02938001
                                   3098          IEXCGEN DC,'ENTIER'         ENTIER                           02939001
002525 444D53484451                3099+         DC    X'444D53484451'                                        01-IEXCG
00252B                0252B 0252B  3100          ORG                                                          02940001
00252B 88810020F0                  3101          DC    X'8881',X'0020F0'                                      02941001
                                   3102 *                                                                     02942001
002530 000000000000                3103          DC    XL6'00'                                                02943001
002536                02536 02530  3104          ORG   *-6                                                    02944001
                                   3105          IEXCGEN DC,'INSYMB'         INSYMB                           02945001
002530 484D52584C41                3106+         DC    X'484D52584C41'                                        01-IEXCG
002536                02536 02536  3107          ORG                                                          02946001
002536 8A8090181F                  3108          DC    X'8A80',X'90181F'                                      02947001
                                   3109 *                                                                     02948001
00253B 000000000000                3110          DC    XL6'00'                                                02949001
002541                02541 0253B  3111          ORG   *-6                                                    02950001
                                   3112          IEXCGEN DC,'INREAL'         INREAL                           02951001
00253B 484D5144404B                3113+         DC    X'484D5144404B'                                        01-IEXCG
002541                02541 02541  3114          ORG                                                          02952001
002541 8A800A1822                  3115          DC    X'8A80',X'0A1822'                                      02953001
                                   3116 *                                                                     02954001
002546 000000000000                3117          DC    XL6'00'                                                02955001
00254C                0254C 02546  3118          ORG   *-6                                                    02956001
                                   3119          IEXCGEN DC,'ININTE'         ININTE                           02957001
002546 484D484D5344                3120+         DC    X'484D484D5344'                                        01-IEXCG
00254C                0254C 0254C  3121          ORG                                                          02958001
00254C 8A80091826                  3122          DC    X'8A80',X'091826'                                      02959001
                                   3123 *                                                                     02960001
002551 000000000000                3124          DC    XL6'00'                                                02961001
002557                02557 02551  3125          ORG   *-6                                                    02962001
                                   3126          IEXCGEN DC,'INBOOL'         INBOOL                           02963001
002551 484D414E4E4B                3127+         DC    X'484D414E4E4B'                                        01-IEXCG
002557                02557 02557  3128          ORG                                                          02964001
002557 8A800B182A                  3129          DC    X'8A80',X'0B182A'                                      02965001
                                   3130 *                                                                     02966001
00255C 000000000000                3131          DC    XL6'00'                                                02967001
002562                02562 0255C  3132          ORG   *-6                                                    02968001
                                   3133          IEXCGEN DC,'INARRA'         INARRA                           02969001
00255C 484D40515140                3134+         DC    X'484D40515140'                                        01-IEXCG
002562                02562 02562  3135          ORG                                                          02970001
002562 88800E182E                  3136          DC    X'8880',X'0E182E'                                      02971001
                                   3137 *                                                                     02972001
002567 000000000000                3138          DC    XL6'00'                                                02973001
00256D                0256D 02567  3139          ORG   *-6                                                    02974001
                                   3140          IEXCGEN DC,'INTARR'         INTARR                           02975001
002567 484D53405151                3141+         DC    X'484D53405151'                                        01-IEXCG
00256D                0256D 0256D  3142          ORG                                                          02976001
00256D 88800D1832                  3143          DC    X'8880',X'0D1832'                                      02977001
                                   3144 *                                                                     02978001
002572 000000000000                3145          DC    XL6'00'                                                02979001
002578                02578 02572  3146          ORG   *-6                                                    02980001
                                   3147          IEXCGEN DC,'INBARR'         INBARR                           02981001
002572 484D41405151                3148+         DC    X'484D41405151'                                        01-IEXCG
002578                02578 02578  3149          ORG                                                          02982001
002578 8880071836                  3150          DC    X'8880',X'071836'                                      02983001
                                   3151 *                                                                     02984001
00257D 000000000000                3152          DC    XL6'00'                                                02985001
002583                02583 0257D  3153          ORG   *-6                                                    02986001
                                   3154          IEXCGEN DC,'OUTSYM'         OUTSYM                           02987001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

00257D 4E545352584C                  3155+           DC    X'4E545352584C'                                        01-IEXCG
002583                  02583 02583  3156            ORG                                                          02988001
002583 888010143B                    3157            DC    X'8880',X'10143B'                                      02989001
                                     3158 *                                                                       02990001
002588 000000000000                  3159            DC    XL6'00'                                                02991001
00258E                  0258E 02588  3160            ORG   *-6                                                    02992001
                                     3161            IEXCGEN DC,'OUTREA'           OUTREA                         02993001
002588 4E5453514440                  3162+           DC    X'4E5453514440'                                        01-IEXCG
00258E                  0258E 0258E  3163            ORG                                                          02994001
00258E 888002143E                    3164            DC    X'8880',X'02143E'                                      02995001
                                     3165 *                                                                       02996001
002593 000000000000                  3166            DC    XL6'00'                                                02997001
002599                  02599 02593  3167            ORG   *-6                                                    02998001
                                     3168            IEXCGEN DC,'OUTINT'           OUTINT                         02999001
002593 4E5453484D53                  3169+           DC    X'4E5453484D53'                                        01-IEXCG
002599                  02599 02599  3170            ORG                                                          03000001
002599 8880011442                    3171            DC    X'8880',X'011442'                                      03001001
                                     3172 *                                                                       03002001
00259E 000000000000                  3173            DC    XL6'00'                                                03003001
0025A4                  025A4 0259E  3174            ORG   *-6                                                    03004001
                                     3175            IEXCGEN DC,'OUTBOO'           OUTBOO                         03005001
00259E 4E5453414E4E                  3176+           DC    X'4E5453414E4E'                                        01-IEXCG
0025A4                  025A4 025A4  3177            ORG                                                          03006001
0025A4 8880031446                    3178            DC    X'8880',X'031446'                                      03007001
                                     3179 *                                                                       03008001
0025A9 000000000000                  3180            DC    XL6'00'                                                03009001
0025AF                  025AF 025A9  3181            ORG   *-6                                                    03010001
                                     3182            IEXCGEN DC,'OUTARR'           OUTARR                         03011001
0025A9 4E5453405151                  3183+           DC    X'4E5453405151'                                        01-IEXCG
0025AF                  025AF 025AF  3184            ORG                                                          03012001
0025AF 888006144A                    3185            DC    X'8880',X'06144A'                                      03013001
                                     3186 *                                                                       03014001
0025B4 000000000000                  3187            DC    XL6'00'                                                03015001
0025BA                  025BA 025B4  3188            ORG   *-6                                                    03016001
                                     3189            IEXCGEN DC,'OUTTAR'           OUTTAR                         03017001
0025B4 4E5453534051                  3190+           DC    X'4E5453534051'                                        01-IEXCG
0025BA                  025BA 025BA  3191            ORG                                                          03018001
0025BA 888005144E                    3192            DC    X'8880',X'05144E'                                      03019001
                                     3193 *                                                                       03020001
0025BF 000000000000                  3194            DC    XL6'00'                                                03021001
0025C5                  025C5 025BF  3195            ORG   *-6                                                    03022001
                                     3196            IEXCGEN DC,'OUTBAR'           OUTBAR                         03023001
0025BF 4E5453414051                  3197+           DC    X'4E5453414051'                                        01-IEXCG
0025C5                  025C5 025C5  3198            ORG                                                          03024001
0025C5 8880071452                    3199            DC    X'8880',X'071452'                                      03025001
                                     3200 *                                                                       03026001
0025CA 000000000000                  3201            DC    XL6'00'                                                03027001
0025D0                  025D0 025CA  3202            ORG   *-6                                                    03028001
                                     3203            IEXCGEN DC,'OUTSTR'           OUTSTR                         03029001
0025CA 4E5453525351                  3204+           DC    X'4E5453525351'                                        01-IEXCG
0025D0                  025D0 025D0  3205            ORG                                                          03030001
0025D0 8880001456                    3206            DC    X'8880',X'001456'                                      03031001
                                     3207 *                                                                       03032001
0025D5 000000000000                  3208            DC    XL6'00'                                                03033001
0025DB                  025DB 025D5  3209            ORG   *-6                                                    03034001
                                     3210            IEXCGEN DC,'PUT'              PUT                            03035001
0025D5 4F5453                        3211+           DC    X'4F5453'                                              01-IEXCG
0025D8                  025D8 025DB  3212            ORG                                                          03036001
0025DB 8A8004115A                    3213            DC    X'8A80',X'04115A'                                      03037001
                                     3214 *                                                                       03038001
0025E0 000000000000                  3215            DC    XL6'00'                                                03039001
0025E6                  025E6 025E0  3216            ORG   *-6                                                    03040001
                                     3217            IEXCGEN DC,'GET'              GET                            03041001
0025E0 464453                        3218+           DC    X'464453'                                              01-IEXCG
0025E3                  025E3 025E6  3219            ORG                                                          03042001
0025E6 8A8004115E                    3220            DC    X'8A80',X'04115E'                                      03043001
                                     3221 *                                                                       03044001
                        0013F        3222 FIXITABL EQU   *-FIXITAB             L'FIXITAB                        03045001
                                     3223 *                                                                       03046001
0025F0                               3224            LTORG                                                        03047001
                                     3225 *                                                                       03048001
000000                  00000 00CB6  3226 WORKAREA DSECT                                                          03049001
                                     3227 *                                                                       03050001
                                     3228            COPY  WORKAREA                                               03051001
                                     3229=*                                                                       00001001
                                     3230=*          WORKAREA - MAPPING CSECT IEX00001                            00002001
                                     3231=*                                                                       00003001
                                     3232=*          ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT 00004001
                                     3233=*                                                                       00005001
000000 0000000000000000              3234=SAVEAREA DC    18F'0'                                                   00006001
                                     3235=*                                                                       00007001
                                     3236=*          DCB ADDRS                                                    00008001
                                     3237=*                                                                       00009001
000048                               3238=DCBTABLE DC    0F'0'                                                    00010001
000048 00000000                      3239=ALINDCB  DC    A(0)                                                     00011001
00004C 00000000                      3240=         DC    A(0)                                                     00012001
000050 00000000                      3241=         DC    A(0)                                                     00013001
000054 00000000                      3242=         DC    A(0)                                                     00014001
000058 00000000                      3243=ASYSDCB  DC    A(0)                                                     00015001
00005C 00000000                      3244=APRTDCB  DC    A(0)                                                     00016001
000060 00000000                      3245=APCHDCB  DC    A(0)                                                     00017001
000064 00000000                      3246=AUT1DCB  DC    A(0)                                                     00018001
000068 00000000                      3247=AUT2DCB  DC    A(0)                                                     00019001
00006C 00000000                      3248=AUT3DCB  DC    A(0)                                                     00020001
                                     3249=*                                                                       00021001
                                     3250=*          END OF DATA EXIT ADDRS                                       00022001
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   3251=*                                                                       00023001
000070 00000000                    3252=EODUT1   DC    A(0)                    SYSUT1                           00024001
000074 00000000                    3253=EODUT2   DC    A(0)                    SYSUT2                           00025001
000078 00000000                    3254=EODUT3   DC    A(0)                    SYSUT3                           00026001
00007C 00000000                    3255=EODIN    DC    A(0)                    SYSIN                            00027001
                                   3256=*                                                                       00028001
                                   3257=*        OPTION SWITCHES IN COMPFLGS                                    00029001
                                   3258=*                                                                       00030001
                                   3259=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -                  00031001
                                   3260=*                                                                       00032001
                                   3261=*        PURPOSE                   POSITION                             00033001
                                   3262=*                                  BYTE 1    BYTE 2    BYTE 3           00034001
                                   3263=*                                  01234567  01234567  01234567         00035001
                                   3264=*                                                                       00036001
                                   3265=*        COMPMODE (SYNTAX CHECK)   X                                    00037001
                                   3266=*        SUBSCRIPT OPTIMIZATION     X                                   00038001
                                   3267=*        WARNING ERROR               X                                  00039001
                                   3268=*        SERIOUS ERROR                X                                 00040001
                                   3269=*        TERMINATING ERROR             X                                00041001
                                   3270=*        PROCEDURE/PROGRAM              X                               00042001
                                   3271=*        LONG/SHORT PRECISION            X                              00043001
                                   3272=*        OPERAND                          X                             00044001
                                   3273=*                                                                       00045001
                                   3274=*        NOSOURCE/SOURCE                     X                          00046001
                                   3275=*        NOLOAD/LOAD                          X                         00047001
                                   3276=*        NODECK/DECK                           X                        00048001
                                   3277=*        ISO/EBCDIC                             X                       00049001
                                   3278=*        PROGRAM INTERRUPT                       X                      00050001
                                   3279=*        TERMINATING PHASE ENTERED                X                     00051001
                                   3280=*        NO BUFFERS ASSIGNED                       X                    00052001
                                   3281=*        NO COMPILATION POSSIBLE                    X                   00053001
                                   3282=*                                                                       00054001
                                   3283=*        SYSPRINT DOWN                                 X                00055001
                                   3284=*        WHOLE SOURCE PROG IN CORE                      X               00056001
                                   3285=*        NO OPTAB                                        X              00057001
                                   3286=*        SYSPRINT NOT OPENED                              X             00058001
                                   3287=*        ERROR UNRELATED TO SEMICOLON NR                   X            00059001
                                   3288=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)     X           00060001
                                   3289=*        60 CHARACTER SET                                    X          00061001
                                   3290=*        (RESERVED)                                           X         00062001
                                   3291=*                                                                       00063001
000080 00220000                    3292=COMPFLGS DC    X'00220000'             PARAMETERS AND SWITCHES          00064001
                                   3293=*                                                                       00065001
                                   3294=*        OPTION SWITCHES IN COMPFLGS                                    00066001
                                   3295=*                                                                       00067001
                      00080        3296=COMPMODE EQU   X'80'                   SYNTAX CHECK MODE                00068001
                      00040        3297=SUBSCOPT EQU   X'40'                   SUBSCRIPT OPTIMIZATION           00069001
                      000FB        3298=PGR      EQU   X'FB'                                                    00070001
                      00004        3299=PROC     EQU   X'04'                   PRECOMPILED PROCEDURE            00071001
                                   3300=*                                                                       00072001
                      000FD        3301=SHRT     EQU   X'FD'                                                    00073001
                      00002        3302=LNG      EQU   X'02'                                                    00074001
                      00001        3303=OPERAND  EQU   X'01'                                                    00075001
                                   3304=*                                                                       00076001
                                   3305=*        ERROR SEVERITY INDICATORS IN COMPFLGS                          00077001
                                   3306=*                                                                       00078001
                      00020        3307=WERR     EQU   X'20'                   WARNING ERROR                    00079001
                      00010        3308=SERR     EQU   X'10'                   SERIOUS ERROR                    00080001
                      00008        3309=TERR     EQU   X'08'                   TERMINATING ERROR                00081001
                                   3310=*                                                                       00082001
                                   3311=*        OPTION SWITCHES IN COMPFLGS+1                                  00083001
                                   3312=*                                                                       00084001
                      0007F        3313=SRCE     EQU   X'7F'                                                    00085001
                      00080        3314=NSRCE    EQU   X'80'                                                    00086001
                                   3315=*                                                                       00087001
                      000BF        3316=LOAD     EQU   X'BF'                                                    00088001
                      00040        3317=NLOAD    EQU   X'40'                                                    00089001
                                   3318=*                                                                       00090001
                      000DF        3319=DECK     EQU   X'DF'                                                    00091001
                      00020        3320=NDECK    EQU   X'20'                                                    00092001
                                   3321=*                                                                       00093001
                      000EF        3322=EBCDIC   EQU   X'EF'                                                    00094001
                      00010        3323=ISO      EQU   X'10'                                                    00095001
                                   3324=*                                                                       00096001
                                   3325=*        TERMINATION SWITCHES IN COMPFLGS+1                             00097001
                                   3326=*                                                                       00098001
                      00008        3327=ERR      EQU   X'08'                   PROGRAM INTERRUPT HAS            00099001
                                   3328=*                                      OCCURED IN COMPILER              00100001
                      00004        3329=TERM     EQU   X'04'                   LAST PHASE HAS BEEN ENTERED      00101001
                      00002        3330=NOBUF    EQU   X'02'                   ERROR POOL IS IN WORKAREA        00102001
                                   3331=*                                      NO SCE PROG BUFF 1               00103001
                      00001        3332=NOGO     EQU   X'01'                   COMPILATION NOT POSSIBLE         00104001
                                   3333=*                                      DO NOT START SCAN 1              00105001
                      00003        3334=NOBUNOGO EQU   X'03'                   NOBUF AND NOGO                   00106001
                                   3335=*                                                                       00107001
                                   3336=*        SWITCHES IN COMPFLGS+2                                         00108001
                                   3337=*                                                                       00109001
                      00080        3338=PRT      EQU   X'80'                   SYSPRINT NOT AVAILABLE           00110001
                      00040        3339=SPIC     EQU   X'40'                   SOURCE PROGRAM IN STORAGE        00111001
                      00020        3340=NOPT     EQU   X'20'                   NO SUBSCRIPT OPTIMIZATION        00112001
                      00010        3341=PRTNO    EQU   X'10'                   SYSPRINT NOT OPENED              00113001
                      00008        3342=NOSC     EQU   X'08'                   SEMICOLON COUNTER NOT VALID      00114001
                                   3343=*                                                                       00115001
                      00004        3344=NOTEST   EQU   X'04'                                                    00116001
                      000FB        3345=TEST     EQU   X'FB'                   EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                   3346=*                                                                       00118001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

                        00002        3347=SET60     EQU   X'02'                 60 CHARACTER SET IS TO BE USED     00119001
                                     3348=*                                                                       00120001
                                     3349=*         MISCELLANEOUS CONTROL INFORMATION                             00121001
                                     3350=*                                                                       00122001
000084 0000B000                      3351=SIZE      DC    F'45056'           AVAILABLE MAIN STORAGE - NOT USED    00123001
000088 00000000                      3352=PICAADD   DC    A(0)               ADDR OF PICA OF THE INVOKER          00124001
00008C 00000000                      3353=HDING     DC    F'0'               ADDR OF HEADING INFO OF THE INVOKER  00125001
000090 00000000                      3354=ERET      DC    F'0'               RETURN ADDR FOR PROGRAM              00126001
                                     3355=*                                  AND I/O ERRORS                       00127001
000094 0000000C                      3356=PAGECNT   DC    PL4'0'             PAGE COUNT                           00128001
000098 0000                          3357=LINCNT    DC    H'0'               COUNTER OF LINES PER PAGE            00129001
00009A 0038                          3358=MAXLINES  DC    H'56'              MAX NUMBER OF PRINT LINES PER PAGE   00130001
00009C 0000                          3359=SEMCNT    DC    H'0'               SEMICOLON COUNTER                    00131001
00009E 0032                          3360=PBN       DC    H'50'              HIGHEST PROGRAM BLOCK NUMBER         00132001
0000A0 0000                          3361=KBN       DC    H'0'               HIGHEST CONSTANT POOL NUMBER         00133001
                        0001C        3362=LATNR     EQU   28                 NR OF LIBRARY STAND FUNCTIONS        00134001
                        0006C        3363=LATBEG    EQU   4*(LATNR-1)                                             00135001
0000A2 006C                          3364=LN        DC    AL2(LATBEG)        LAST USED DISPLACEMENT IN LAT        00136001
0000A4 00000000                      3365=PRPT      DC    F'0'               PROGRAM POINTER                      00137001
0000A8 00000000                      3366=SAVOUTA   DC    F'0'                                                    00138001
0000AC                               3367=OUTAREA2  DS    F                  SYSPUNCH SAVE AREA                   00139001
0000B0 40404040                      3368=PIDENT    DC    CL4' '             PROGRAM IDENTIFICATION               00140001
0000B4 0000000C                      3369=CARDCNT   DC    PL4'0'             OBJECT PROGRAM DECK SEQUENCE NUMBER  00141001
0000B8 00000000                      3370=PRTRTADD  DC    A(0)               ADDR OF PRINT ROUTINE                00142001
                                     3371=*                                                                       00143001
                                     3372=*         ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE     00144001
                                     3373=*                                                                       00145001
0000BC 00000278                      3374=ERRPOOL   DC    A(PRELPOOL)        FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                      3375=NEXTERR   DC    A(PRELPOOL)        NEXT FREE PLACE IN ERROR POOL        00147001
0000C4                               3376=ENDPOOL   DS    F                  LAST BYTE OF ERROR POOL-23           00148001
0000C8                               3377=SRCE1ADD  DS    F                  SOURCE PROGRAM BUFFER 1              00149001
0000CC                               3378=SRCE1END  DS    F                  ADDR OF LAST BYTE+1                  00150001
0000D0                               3379=SULTSTRT  DS    F                  ID OF LAST ITAB RECORD               00151001
                                     3380=*                                                                       00152001
                                     3381=*                                                                       00153001
                                     3382=*         TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                   00154001
                                     3383=*                                                                       00155001
0000D4                               3384=INBLKS    DS    H                  MAX BLKSIZE FOR SYSIN     - NOT USED 00156001
0000D6                               3385=PRTBLKS   DS    H                  MAX BLKSIZE SYSPRINT      - NOT USED 00157001
0000D8                               3386=LINBLKS   DS    H                  MAX BLKSIZE FOR SYSLIN    - NOT USED 00158001
0000DA                               3387=PCHBLKS   DS    H                  MAX BLKSIZE FOR SYSPUNCH - NOT USED  00159001
0000DC                               3388=POOLS     DS    F                  SIZE OF ERROR POOL                   00160001
0000E0                               3389=SRCE1S    DS    F                  SIZE OF SOURCE PROG BUFFERS 1 AND 2  00161001
                        000E0        3390=SRCE3S    EQU   SRCE1S             SIZE OF SOURCE PROG BUFFERS 3 AND 4  00162001
0000E4                               3391=ITAB10S   DS    F                  SIZE OF ITAB FOR PHASE 10            00163001
0000E8                               3392=ITAB20S   DS    F                  SIZE OF ITAB FOR PHASE 20            00164001
0000EC                               3393=ITAB30S   DS    F                  SIZE OF ITAB FOR PHASE 30            00165001
0000F0                               3394=CRIDTABS  DS    F                  SIZE OF CRIDTAB FOR PHASE 30         00166001
0000F4                               3395=SUTAB30S  DS    F                  SIZE OF SUTAB BUFFER OF PHASE 30     00167001
0000F8                               3396=LVTAB30S  DS    F                  SIZE OF LVTAB BUFFER FOR PHASE 30    00168001
0000FC                               3397=OPTABS    DS    F                  SIZE OF OPTAB BUFFERS 1 AND 2        00169001
000100                               3398=SUTAB40S  DS    F                  SIZE OF SUTAB IN PHASE 40            00170001
000104                               3399=LVTAB40S  DS    F                  SIZE OF LVTAB IN PHASE 40            00171001
000108                               3400=OOSTACKS  DS    F                  SIZE OF OPERATOR/OPERAND STACK       00172001
                                     3401=*                                                                       00173001
                                     3402=*         AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF          00174001
                                     3403=*         EACH NEW PAGE                                                 00175001
                                     3404=*                                                                       00176001
                        0010C        3405=PAGEHEAD  EQU   *                                                       00177001
00010C 4040404040404040              3406=PAGEHD1   DC    CL121' '                FIRST HEADLINE                  00178001
000185                  00185 0010C  3407=          ORG   PAGEHD1                                                 00179001
00010C F1                            3408=PAGEHD1C  DC    C'1'                    ASA CNTL                        00180001
00010D 4040404040404040              3409=          DC    CL10' '                 SPACER                          00181001
000117 4040404040404040              3410=PAGEHD1D  DC    CL100' '                PAGE TEXT HEADING               00182001
00017B                  0017B 0017D  3411=          ORG   PAGEHD1+113                                             00183001
00017D D7C1C7C5                      3412=PAGEHD1P  DC    CL4'PAGE'               PAGE                            00184001
000181 40404040                      3413=PAGENUMB  DC    CL4' '                  PAGE COUNTER                    00185001
000185                  00185 00185  3414=          ORG                                                           00186001
                                     3415=*                                                                       00187001
000185 4040404040404040              3416=PAGEHD2   DC    CL121' '                SECOND HEADLINE                 00188001
0001FE                  001FE 00185  3417=          ORG   PAGEHD2                                                 00189001
000185 40                            3418=PAGEHD2C  DC    C' '                    ASA CNTL                        00190001
000186 4040404040404040              3419=          DC    CL10' '                 SPACER                          00191001
000190 4040404040404040              3420=PAGEHD2D  DC    CL100' '                PAGE TEXT HEADING               00192001
0001F4                  001F4 001FE  3421=          ORG                                                           00193001
                                     3422=*                                                                       00194001
0001FE 4040404040404040              3423=PAGEHD3   DC    CL121' '                THIRD HEADLINE                  00195001
000277                  00277 001FE  3424=          ORG   PAGEHD3                                                 00196001
0001FE 40                            3425=PAGEHD3C  DC    C' '                    ASA CNTL                        00197001
0001FF 4040404040404040              3426=          DC    CL10' '                 SPACER                          00198001
000209 4040404040404040              3427=PAGEHD3D  DC    CL100' '                PAGE TEXT HEADING               00199001
00026D                  0026D 00277  3428=          ORG                                                           00200001
                                     3429=*                                                                       00201001
                                     3430=*                                                                       00202001
                                     3431=*         END OF STANDARD COMMON AREA                                   00203001
                                     3432=*                                                                       00204001
                        00277        3433=STANDX    EQU   *                                                       00205001
                                     3434=*                                                                       00206001
                                     3435=*         THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL            00207001
                                     3436=*         PHASES AND PARTLY OVERLAY EACH OTHER                          00208001
                                     3437=*                                                                       00209001
                                     3438=*                             NAME OR PURPOSE         NEEDED BY PHASES  00210001
                                     3439=*                                                                       00211001
000277 00
000278                               3440=          DC    0F'0'                                                   00212001
000278 4040404040404040              3441=PRELPOOL  DC    236C' ',20C'X' PRELIMINARY ERROR POOL     IEX10         00213001
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  Active USINGs: WORKAREA,R13  IEX30000,R10,R11,R12

D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.13

000378                  00378 00416  3442=         ORG    PRELPOOL+414                                               00214001
                                     3443=*                              DCB FOR SYSIN                   11          00215001
                                     3444=SYSIN    DCB    DDNAME=SYSIN,                                             X00216001
                                         =                DSORG=PS,                                                 X00217001
                                         =                MACRF=(GM),                                               X00218001
                                         =                RECFM=FB,                                                 X00219001
                                         =                LRECL=80,                                                 X00220001
                                         =                BFTEK=S                                                    00221001


                                     3446+*                        DATA CONTROL BLOCK                               01-DCB
                                     3447+*                                                                         01-DCB
000416 0000
000418                               3448+SYSIN    DC     0F'0'                   ORIGIN ON WORD BOUNDARY           01-DCB

                                     3450+*                        DIRECT ACCESS DEVICE INTERFACE                   01-DCB

000418 0000000000000000              3452+         DC     BL16'0'                  FDAD,DVTBL                       01-DCB
000428 00000000                      3453+         DC     A(0)                     KEYLE,DEVT,TRBAL                 01-DCB

                                     3455+*                        COMMON ACCESS METHOD INTERFACE                   01-DCB

00042C 00                            3457+         DC     AL1(0)                  BUFNO                             01-DCB
00042D 000001                        3458+         DC     AL3(1)                  BUFCB                             01-DCB
000430 0000                          3459+         DC     AL2(0)             BUFL                                   01-DCB
000432 4000                          3460+         DC     BL2'0100000000000000'             DSORG                   01-DCB
000434 00000001                      3461+         DC     A(1)                     IOBAD                            01-DCB

                                     3463+*                        FOUNDATION EXTENSION                             01-DCB

000438 40                            3465+         DC     BL1'01000000'                  BFTEK,BFLN,HIARCHY         01-DCB
000439 000001                        3466+         DC     AL3(1)                  EODAD                             01-DCB
00043C 90                            3467+         DC     BL1'10010000'           RECFM                             01-DCB
00043D 000000                        3468+         DC     AL3(0)                  EXLST                             01-DCB

                                     3470+*                        FOUNDATION BLOCK                                 01-DCB

000440 E2E8E2C9D5404040              3472+         DC     CL8'SYSIN'              DDNAME                            01-DCB
000448 02                            3473+         DC     BL1'00000010'           OFLGS                             01-DCB
000449 00                            3474+         DC     BL1'00000000'                          IFLG               01-DCB
00044A 5000                          3475+         DC     BL2'0101000000000000'   MACR                              01-DCB

                                     3477+*                        BSAM-BPAM-QSAM INTERFACE                         01-DCB

00044C 00                            3479+         DC     BL1'00000000'                                        RER1 01-DCB
00044D 000001                        3480+         DC     AL3(1)                  CHECK, GERR, PERR                 01-DCB
000450 00000001                      3481+         DC     A(1)                    SYNAD                             01-DCB
000454 0000                          3482+         DC     H'0'                    CIND1, CIND2                      01-DCB
000456 0000                          3483+         DC     AL2(0)                  BLKSIZE                           01-DCB
000458 00000000                      3484+         DC     F'0'                    WCPO, WCPL, OFFSR, OFFSW          01-DCB
00045C 00000001                      3485+         DC     A(1)                    IOBA                              01-DCB
000460 00                            3486+         DC     AL1(0)                  NCP                               01-DCB
000461 000001                        3487+         DC     AL3(1)                  EOBR, EOBAD                       01-DCB

                                     3489+*                             QSAM INTERFACE                              01-DCB

000464 00000001                      3491+         DC     A(1)                     RECAD                            01-DCB
000468 0000                          3492+         DC     H'0'                    QSWS                              01-DCB
00046A 0050                          3493+         DC     AL2(80)        LRECL                                      01-DCB
00046C 00                            3494+         DC     BL1'00000000'           EROPT                             01-DCB
00046D 000001                        3495+         DC     AL3(1)                  CNTRL                             01-DCB
000470 00000000                      3496+         DC     F'0'                    PRECL                             01-DCB
000474 00000001                      3497+         DC     A(1)                    EOB                               01-DCB
                                     3498=*               SYNAD=SYNAD    (ASSEMBLED IN IEX00001)                     00222001
                                     3499=*               EODAD=EODADIN  (INSERTED BY IEX11)                         00223001
000478                  00478 00278  3500=         ORG    PRELPOOL                                                   00224001
000278                               3501=PBTAB2   DS     CL510          PROGR. BLOCK TABLE 2          20-50         00225001
000478                               3502=         DS     0F                                                         00226001
000478                               3503=PBTAB1   DS     CL255          PROGR. BLOCK TABLE 1          11-20         00227001
000577                  00577 00478  3504=         ORG    PBTAB1                                                     00228001
000478                               3505=FSTAB    DS     CL255          FOR STATEMENT TABLE           30-40         00229001
                                     3506=*                              DCB FOR SYSUT1                11-30         00230001
                                     3507=SYSUT1   DCB    DDNAME=SYSUT1,                                            X00231001
                                         =                DSORG=PS,                                                 X00232001
                                         =                MACRF=(R,W),                                              X00233001
                                         =                RECFM=F                                                    00234001


                                     3509+*                        DATA CONTROL BLOCK                               01-DCB
                                     3510+*                                                                         01-DCB
000577 00
000578                               3511+SYSUT1   DC     0F'0'                   ORIGIN ON WORD BOUNDARY           01-DCB

                                     3513+*                        DIRECT ACCESS DEVICE INTERFACE                   01-DCB

000578 0000000000000000              3515+         DC     BL16'0'                  FDAD,DVTBL                       01-DCB
000588 00000000                      3516+         DC     A(0)                     KEYLE,DEVT,TRBAL                 01-DCB

                                     3518+*                        COMMON ACCESS METHOD INTERFACE                   01-DCB

00058C 00                            3520+         DC     AL1(0)                  BUFNO                             01-DCB
00058D 000001                        3521+         DC     AL3(1)                  BUFCB                             01-DCB
000590 0000                          3522+         DC     AL2(0)             BUFL                                   01-DCB
000592 4000                          3523+         DC     BL2'0100000000000000'             DSORG                   01-DCB
000594 00000001                      3524+         DC     A(1)                     IOBAD                            01-DCB
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13
                                     3526+*                        FOUNDATION EXTENSION                              01-DCB

000598 00                            3528+        DC     BL1'00000000'                     BFTEK,BFLN,HIARCHY        01-DCB
000599 000001                        3529+        DC     AL3(1)                  EODAD                               01-DCB
00059C 80                            3530+        DC     BL1'10000000'           RECFM                               01-DCB
00059D 000000                        3531+        DC     AL3(0)                  EXLST                               01-DCB

                                     3533+*                        FOUNDATION BLOCK                                  01-DCB

0005A0 E2E8E2E4E3F14040              3535+        DC     CL8'SYSUT1'             DDNAME                              01-DCB
0005A8 02                            3536+        DC     BL1'00000010'           OFLGS                               01-DCB
0005A9 00                            3537+        DC     BL1'00000000'                          IFLG                 01-DCB
0005AA 2020                          3538+        DC     BL2'0010000000100000'   MACR                                01-DCB

                                     3540+*                        BSAM-BPAM-QSAM INTERFACE                          01-DCB

0005AC 00                            3542+        DC     BL1'00000000'                                          RER1 01-DCB
0005AD 000001                        3543+        DC     AL3(1)                  CHECK, GERR, PERR                   01-DCB
0005B0 00000001                      3544+        DC     A(1)                    SYNAD                               01-DCB
0005B4 0000                          3545+        DC     H'0'                    CIND1, CIND2                        01-DCB
0005B6 0000                          3546+        DC     AL2(0)                  BLKSIZE                             01-DCB
0005B8 00000000                      3547+        DC     F'0'                    WCPO, WCPL, OFFSR, OFFSW            01-DCB
0005BC 00000001                      3548+        DC     A(1)                    IOBA                                01-DCB
0005C0 00                            3549+        DC     AL1(0)                  NCP                                 01-DCB
0005C1 000001                        3550+        DC     AL3(1)                  EOBR, EOBAD                         01-DCB

                                     3552+*                          BSAM-BPAM INTERFACE                             01-DCB

0005C4 00000001                      3554+        DC     A(1)                    EOBW                                01-DCB
0005C8 0000                          3555+        DC     H'0'                    DIRCT                               01-DCB
0005CA 0000                          3556+        DC     AL2(0)         LRECL                                        01-DCB
0005CC 00000001                      3557+        DC     A(1)                    CNTRL, NOTE, POINT                  01-DCB
                                     3558=*              SYNAD=SYNAD,   (ASSEMBLED IN IEX00001)                      00235001
                                     3559=*              EODAD=EODAD1                                                00236001
                                     3560=*                                                                          00237001
0005D0                               3561=        DS     0F                                                          00238001
0005D0                               3562=SPTAB   DS     CL255          SCOPE TABLE                  11-30           00239001
0006D0                               3563=        DS     0F                                                          00240001
                 006CD               3564=GPTAB   EQU    *-3            GROUP TABLE                  11-30           00241001
0006D0                               3565=        DS     CL1510                                                      00242001
                                     3566=*                                                                          00243001
                                     3567=*       END OF SYMLIB PART OF COMMON WORK AREA                             00244001
                                     3568=*                                                                          00245001
                                     3569 *                                                                          03052001
                 00478               3570 ZFOSTA  EQU    FSTAB                                                       03053001
                                     3571 *                                                                          03054001
000CB6           00CB6 00578         3572         ORG    SYSUT1                                                      03055001
                                     3573 *                                                                          03056001
000578                               3574 FSNMAX  DS     H                                                           03057001
00057A                               3575 LVCOUNT DS     H                                                           03058001
00057C                               3576 SUCOUNT DS     H                                                           03059001
000580                               3577 ZLEVEN  DS     F                                                           03060001
000584                               3578 ZSUTEN  DS     F                                                           03061001
                                     3579 *                                                                          03062001
                                     3580 *       CHARACTER EQUATES                                                  03063001
                                     3581 *                                                                          03064001
                                     3582         IEXCHAR                                                            03065001
                                     3583+*                                                                          01-IEXCH
                                     3584+*       CHARACTER A - Z                                                    01-IEXCH
                                     3585+*                                                                          01-IEXCH
                 00040               3586+XFA     EQU    X'40'                                                       02-IEXCG
                 00041               3587+XFB     EQU    X'41'                                                       02-IEXCG
                 00042               3588+XFC     EQU    X'42'                                                       02-IEXCG
                 00043               3589+XFD     EQU    X'43'                                                       02-IEXCG
                 00044               3590+XFE     EQU    X'44'                                                       02-IEXCG
                 00045               3591+XFF     EQU    X'45'                                                       02-IEXCG
                 00046               3592+XFG     EQU    X'46'                                                       02-IEXCG
                 00047               3593+XFH     EQU    X'47'                                                       02-IEXCG
                 00048               3594+XFI     EQU    X'48'                                                       02-IEXCG
                 00049               3595+XFJ     EQU    X'49'                                                       02-IEXCG
                 0004A               3596+XFK     EQU    X'4A'                                                       02-IEXCG
                 0004B               3597+XFL     EQU    X'4B'                                                       02-IEXCG
                 0004C               3598+XFM     EQU    X'4C'                                                       02-IEXCG
                 0004D               3599+XFN     EQU    X'4D'                                                       02-IEXCG
                 0004E               3600+XFO     EQU    X'4E'                                                       02-IEXCG
                 0004F               3601+XFP     EQU    X'4F'                                                       02-IEXCG
                 00050               3602+XFQ     EQU    X'50'                                                       02-IEXCG
                 00051               3603+XFR     EQU    X'51'                                                       02-IEXCG
                 00052               3604+XFS     EQU    X'52'                                                       02-IEXCG
                 00053               3605+XFT     EQU    X'53'                                                       02-IEXCG
                 00054               3606+XFU     EQU    X'54'                                                       02-IEXCG
                 00055               3607+XFV     EQU    X'55'                                                       02-IEXCG
                 00056               3608+XFW     EQU    X'56'                                                       02-IEXCG
                 00057               3609+XFX     EQU    X'57'                                                       02-IEXCG
                 00058               3610+XFY     EQU    X'58'                                                       02-IEXCG
                 00059               3611+XFZ     EQU    X'59'                                                       02-IEXCG
                                     3612+*                                                                          01-IEXCH
                                     3613+*       NATIONAL CHARACTERS                                                01-IEXCH
                                     3614+*                                                                          01-IEXCH
                 0005A               3615+XFDOLLAR EQU   X'5A'                                                       02-IEXCG
                 0005B               3616+XFUNDER EQU    X'5B'                                                       02-IEXCG
                 0005C               3617+XFHASH  EQU    X'5C'                                                       02-IEXCG
                 0005D               3618+XFAT    EQU    X'5D'                                                       02-IEXCG
                                     3619+*                                                                          01-IEXCH
                                     3620+*       NUMERIC 0 - 9                                                      01-IEXCH
                                     3621+*                                                                          01-IEXCH
```

```
D-Loc  Object Code      Addr1 Addr2  Stmt    Source Statement                                      X390 3.1.04  2012/08/17 13.13

                        00030        3622+XF0      EQU   X'30'                                                       02-IEXCG
                        00031        3623+XF1      EQU   X'31'                                                       02-IEXCG
                        00032        3624+XF2      EQU   X'32'                                                       02-IEXCG
                        00033        3625+XF3      EQU   X'33'                                                       02-IEXCG
                        00034        3626+XF4      EQU   X'34'                                                       02-IEXCG
                        00035        3627+XF5      EQU   X'35'                                                       02-IEXCG
                        00036        3628+XF6      EQU   X'36'                                                       02-IEXCG
                        00037        3629+XF7      EQU   X'37'                                                       02-IEXCG
                        00038        3630+XF8      EQU   X'38'                                                       02-IEXCG
                        00039        3631+XF9      EQU   X'39'                                                       02-IEXCG
                                     3632+*                                                                          01-IEXCH
                                     3633+*        SPECIAL CHARS                                                     01-IEXCH
                                     3634+*                                                                          01-IEXCH
                        00000        3635+XFPLUS   EQU   X'00'                                                       02-IEXCG
                        00001        3636+XFMINUS  EQU   X'01'                                                       02-IEXCG
                        00002        3637+XFASTER  EQU   X'02'                                                       02-IEXCG
                        00003        3638+XFSLASH  EQU   X'03'                                                       02-IEXCG
                        00006        3639+XFLBRAC  EQU   X'06'                                                       02-IEXCG
                        00007        3640+XFCOLON  EQU   X'07'                                                       02-IEXCG
                        00008        3641+XFLSQBR  EQU   X'08'                                                       02-IEXCG
                        0000B        3642+XFSCOLON EQU   X'0B'                                                       02-IEXCG
                        00010        3643+XFEQUAL  EQU   X'10'                                                       02-IEXCG
                        00011        3644+XFLT     EQU   X'11'                                                       02-IEXCG
                        00012        3645+XFGT     EQU   X'12'                                                       02-IEXCG
                        00020        3646+XFNOT    EQU   X'20'                                                       02-IEXCG
                        00022        3647+XFOR     EQU   X'22'                                                       02-IEXCG
                        00023        3648+XFAMPER  EQU   X'23'                                                       02-IEXCG
                        00025        3649+XFCOMMA  EQU   X'25'                                                       02-IEXCG
                        00026        3650+XFRBRAC  EQU   X'26'                                                       02-IEXCG
                        00028        3651+XFRSQBR  EQU   X'28'                                                       02-IEXCG
                        0002B        3652+XFBLANK  EQU   X'2B'                                                       02-IEXCG
                        0002D        3653+XFPERIOD EQU   X'2D'                                                       02-IEXCG
                        0002E        3654+XFQUOTE  EQU   X'2E'                                                       02-IEXCG
                                     3655+*                                                                          01-IEXCH
                        0000C        3656+XFDQUOTE EQU   X'0C'                                                       02-IEXCG
                                     3657+*                                                                          01-IEXCH
                        0002C        3658+XFEXCLM  EQU   X'2C'                                                       02-IEXCG
                        0002C        3659+XFPERCT  EQU   X'2C'                                                       02-IEXCG
                                     3660+*                                                                          01-IEXCH
                                     3661+*        INTERNAL CONTROL CODES                                            01-IEXCH
                                     3662+*                                                                          01-IEXCH
                        00005        3663+XFPOWER    EQU   X'05'                                                     01-IEXCH
                        00016        3664+XFASSIGN   EQU   X'16'                                                     01-IEXCH
                        00017        3665+XFGOTO     EQU   X'17'                                                     01-IEXCH
                        00018        3666+XFFOR      EQU   X'18'                                                     01-IEXCH
                        0001D        3667+XFIF       EQU   X'1D'                                                     01-IEXCH
                        00027        3668+XFLABEL    EQU   X'27'                                                     01-IEXCH
                        00029        3669+XFDELTA    EQU   X'29'                                                     01-IEXCH
                        0002C        3670+XFEND      EQU   X'2C'                                                     01-IEXCH
                        0002F        3671+XFZETA     EQU   X'2F'                                                     01-IEXCH
                        0003E        3672+XFDECPT    EQU   X'3E'                                                     01-IEXCH
                                     3673 *                                                                          03066001
                                     3674 *        REGISTER EQUATES                                                  03067001
                                     3675 *                                                                          03068001
                                     3676          IEZREGS                                                           03069001
                        00000        3677+R0       EQU   0                                                           01-IEZRE
                        00001        3678+R1       EQU   1                                                           01-IEZRE
                        00002        3679+R2       EQU   2                                                           01-IEZRE
                        00003        3680+R3       EQU   3                                                           01-IEZRE
                        00004        3681+R4       EQU   4                                                           01-IEZRE
                        00005        3682+R5       EQU   5                                                           01-IEZRE
                        00006        3683+R6       EQU   6                                                           01-IEZRE
                        00007        3684+R7       EQU   7                                                           01-IEZRE
                        00008        3685+R8       EQU   8                                                           01-IEZRE
                        00009        3686+R9       EQU   9                                                           01-IEZRE
                        0000A        3687+R10      EQU   10                                                          01-IEZRE
                        0000B        3688+R11      EQU   11                                                          01-IEZRE
                        0000C        3689+R12      EQU   12                                                          01-IEZRE
                        0000D        3690+R13      EQU   13                                                          01-IEZRE
                        0000E        3691+R14      EQU   14                                                          01-IEZRE
                        0000F        3692+R15      EQU   15                                                          01-IEZRE
                                     3693 *                                                                          03070001
000000                               3694          END   IEX30000                                                    03071001
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Symbol    Length    Value     Id    Type Asm  Program    Defn  References                        X390 3.1.04  2012/08/17 13.13

ADDEND         2 00002050 00000001  H H                2867  1420M 1434  1436  1451M 1456M 1477  1478M 1494M 1518  1520
                                                             1615  1620
ALIGN          4 00002180 00000001  F F                2945   677M  935   961  1005  1038  1052  1081M 1085M 1124M 1178
                                                             1185  1202  1204M 1209  1211M 1241  1269  1277  1329  1562
                                                             1851  2946
ALIGNH         4 00002182 00000001  U                  2946   678   934M  960M 1004M 1037M 1051M 1082  1086  1125  1177M
                                                             1184M 1201M 1205  1208M 1212  1240M 1268M 1276M 1328M 1561M
                                                             1850M
ALINDCB        4 00000048 FFFFFFFF  A A                3239  2703
APCHDCB        4 00000060 FFFFFFFF  A A                3245  2701  2718
ARRAY          4 000004B2 00000001  I                   502   332B
ARRAYERR       2 00001F88 00000001  H H                2798   865
AUT1DCB        4 00000064 FFFFFFFF  A A                3246   519  1753
AUT2DCB        4 00000068 FFFFFFFF  A A                3247   582  1676
AUT3DCB        4 0000006C FFFFFFFF  A A                3248   199   207  1865  1872  1880  2039  2046  2055
BETA           4 00000314 00000001  I                   363   315B
BETA1          4 0000031C 00000001  I                   365   378B
BOTH           4 00001E94 00000001  I                  2715  2699B
BRCNT          2 000020AC 00000001  H H                2884   503M  687   689M  750   752M  853
CARDCNT        4 000000B4 FFFFFFFF  P P                3369  2733M 2734
CERR           4 0000196C 00000001  I                  2312  2123B 2303B 2395B 2451B 2457B
CERRA          4 00001988 00000001  I                  2320  2318B
CERREX         6 000019F2 00000001  I                  2352  2320X
CERR1          4 000019A4 00000001  I                  2329  2316B
CERR2          4 000019A8 00000001  I                  2330  2327B
CERR3          4 000019DA 00000001  I                  2344  2331B
CHECK          4 000015D6 00000001  I                  2014   564B  576B  581B 1352B 1371B 1603B 1626B
CLOBRACK       4 0000075E 00000001  I                   723   325B
CLOBRA1        4 000007BC 00000001  I                   747   730B  734B
CLOBRA2        4 00000792 00000001  I                   736   748B
CLOBRA3        4 000007C4 00000001  I                   750   724B
COMMA          4 000006FC 00000001  I                   694   324B
COMPFLGS       4 00000080 FFFFFFFF  X X                3292   184   272   296   299M  300   446   509M  510   533M  613M
                                                              653   694   714M  725   841M  883   908  1920M 2454M 2460M
                                                             2478  2544M 2555  2565  2631M 2658  2698  2700
COMPMODE       1 00000080           U                  3296   446   653   694   714   725   841   883   908  1920  2454
                                                             2460  2478  2544  2565  2631
CPOLEX         4 00001DB2 00000001  I                  2636  2529B 2618B
CRIDTABS       4 000000F0 FFFFFFFF  F F                3394   150   174   244
CRIFLOW        4 00000C36 00000001  I                  1169  1130B 1152B
CRIFLOW1       6 00000C4A 00000001  I                  1173  1182B
CRIFLOW2       2 00000C92 00000001  I                  1191  1174B
CRIFLOW3       6 00000C76 00000001  I                  1184  1176B
CRIFLOW4       4 00000C6E 00000001  I                  1181  1189B
CRIFLOW5       4 00000CA8 00000001  I                  1199  1218B
CRIFLOW6       4 00000CC6 00000001  I                  1206  1200B
CRIFLOW7       6 00000CE4 00000001  I                  1213  1207B
CRIFLOW8       2 00000CFC 00000001  I                  1220  1215B
CRIFODEL       4 00000D46 00000001  I                  1260   448B
CRIFODS        4 00000D58 00000001  I                  1264  1261M
CRIFOD1        4 00000D50 00000001  I                  1262  1273B
CRIFOD2        4 00000D82 00000001  I                  1275  1267B
CRIFOD3        4 00000D7A 00000001  I                  1272  1279B
CRIFOD4        4 00000D98 00000001  I                  1281  1263B 1265B
CRIMA          4 00000B7C 00000001  I                  1103   897B 1014B
CRIMAC         4 00000BE8 00000001  I                  1136  1107B
CRIMAC1        4 00000C10 00000001  I                  1147  1137B
CRIMAC2        4 00000C20 00000001  I                  1152  1141B
CRIMAC3        4 00000C00 00000001  I                  1142  1148B 1153B
CRIMAC4        4 00000BF8 00000001  I                  1140  1150B
CRIMAN1        4 00000BD6 00000001  I                  1130  1112B
CRIMAN2        4 00000B98 00000001  I                  1113  1132B
CRIMA1         4 00000C28 00000001  I                  1155  1104B
CRIMA2         6 00000BB0 00000001  I                  1120  1116B 1145B
CRITI          4 00000A1C 00000001  I                   973   881B
CRITIC         2 00000ACA 00000001  I                  1029  1040B
CRITIC1        4 00000AFA 00000001  I                  1042  1033B
CRITIF         4 00000A9E 00000001  I                  1014   974B
CRITIF1        4 00000AA8 00000001  I                  1017  1021B
CRITIN         4 00000B02 00000001  I                  1047  1025B 1054B
CRITIN1        2 00000B24 00000001  I                  1056  1048B
CRITIN2        4 00000B4A 00000001  I                  1066  1060B
CRITI1         6 00000A32 00000001  I                   979   982B
CRITI2         4 00000A44 00000001  I                   984   980B
CRITI3         2 00000A66 00000001  I                   996   985B 1007B
CRITI4         4 00000A96 00000001  I                  1009  1000B
CURPBN         1 000020AF 00000001  C C                2886   849   855  1901M
DECPO          1 000023F0 00000001  X X                3008  2193
DECPOIN        4 000017D0 00000001  I                  2186   312B
DECPOINL       4 00001864 00000001  I                  2232  2194B
DECPOIN1       4 000017DE 00000001  I                  2190  2114B 2162B 2208B
DECPOIN2       4 000017E2 00000001  I                  2191  2204B 2206B
DECPOIN3       2 000017E6 00000001  I                  2192  2223B
DECPOIN4       6 000017E8 00000001  I                  2193  2233B
DECPOT         4 0000184C 00000001  I                  2225  2201B
DECPSCA        4 00001828 00000001  I                  2213  2199B
DECPTM         4 000016EE 00000001  I                  2112  2105B
DECPZETA       4 0000183C 00000001  I                  2219  2200B
DECP0          2 0000180C 00000001  I                  2203  2197B
DELCRIV        4 00000D00 00000001  I                  1233   918B 1171B
DELCRIV1       2 00000D04 00000001  I                  1234  1247B
DELCRIV2       4 00000D2C 00000001  I                  1244  1239B
DELCRIV3       4 00000D3C 00000001  I                  1249  1245B
DIGIT0         4 00001754 00000001  I                  2149   311B
DIGIT19        4 000016B0 00000001  I                  2094   310B
DIGL0          4 000017C8 00000001  I                  2183  2156B
DIGL19         4 0000174C 00000001  I                  2146  2102B
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Symbol    Length    Value     Id     Type Asm  Program    Defn  References                                 X390 3.1.04  2012/08/17 13.13

DIG0           1 00002392 00000001  X X                 3002  2155
DIG01          2 00001766 00000001  I                   2154  2173B
DIG02          6 00001768 00000001  I                   2155  2184B
DIG19          1 00002334 00000001  X X                 2996  2101
DIG191         4 000016C0 00000001  I                   2099  2160B
DIG192         2 000016C4 00000001  I                   2100  2132B
DIG193         6 000016C6 00000001  I                   2101  2147B
DIPOW          4 00000466 00000001  I                    478   334B
DO             4 0000042C 00000001  I                    453   320B
ENDPOOL        4 000000C4 FFFFFFFF  F F                 3376  1960
EODUT1         4 00000070 FFFFFFFF  A A                 3252   130M
EPSILON        4 000003F2 00000001  I                    432   318B
EPSILON1       4 000003FA 00000001  I                    434   441B
EPSILON2       4 00000410 00000001  I                    440   433B
ERET           4 00000090 FFFFFFFF  F F                 3354   128M  162M
ERROR1         4 00000852 00000001  I                    812   779B
ETA            4 00000418 00000001  I                    445   319B
FACTOR         2 00002056 00000001  H H                 2868  1421M 1449M 1450M 1471M 1472M 1477M 1514  1516  1575M 1582M
                                                              1614  1617
FIXITAB        6 000024AC 00000001  X X                 3023   191   192  3222
FIXITABL       1 0000013F           U                   3222   192   193
FOLI           4 00000912 00000001  I                    874   852B  854B  856B  862B
FOR            4 000003B0 00000001  I                    412   317B
FSNEMBR        1 000020B4 00000001  C C                 2891  1172M 1173  1192
FSNMAX         2 00000578 FFFFFFFF  H H                 3574   554M
FSTAB        255 00000478 FFFFFFFF  C C                 3505   248   416  2082  3570
GAMMA          4 00000628 00000001  I                    633   327B
GENER          8 00002278 00000001  X X                 2980   307  1911
GENTEST        2 0000024A 00000001  I                    306   301B  303B  345B  372B  399B  425B  494B  639B  647B  788B
                                                              2181B 2476B 2496B
GENTEST1       4 00000246 00000001  I                    305   459B  806B  808B
GENTXT         4 00001E14 00000001  I                   2671  2660B
GEN3           4 00001E5E 00000001  I                   2697  2676B 2678B
GEN4           2 00001E5A 00000001  I                   2692  2758B
GEN6           4 00001E38 00000001  I                   2679  2740B
GEN6A          2 00001E4A 00000001  I                   2685  2683B
GEN8           2 00001F02 00000001  I                   2753  2690B
GOTOFOR        2 00001F82 00000001  H H                 2795   949
GPTAB          1 000006CD FFFFFFFF  U                   3564   955
ICHA           4 000012EE 00000001  I                   1745   298B  352B  401B  646B  799B 1933B 2129B 2171B 2220B 2274B
ICHAI          4 00001346 00000001  I                   1778   186B
ICHA1          4 00001300 00000001  I                   1753  1779B
IDENT          4 00000860 00000001  I                    826   781B
IDENTI         1 000022D6 00000001  X X                 2990   773
IDENT2         4 00000878 00000001  I                    833   868B
IDENT3         6 0000087C 00000001  I                    834   836B
IDENT4         4 000008A8 00000001  I                    845   382M  487M  833
IDENT5         4 000008BE 00000001  I                    851   845B
IDENT6         4 00000884 00000001  I                    836   848B  850B
IDENT7         6 000008F8 00000001  I                    863   860B
IEX30000       1 00000000 00000001  J                     77   118U 3694
INCORE         4 000000EA 00000001  I                    190   185B
INCOROP        4 000014CE 00000001  I                   1920   359B  814B  950B 2125B 2305B
INCOROP1       4 000014D8 00000001  I                   1923  1929B 1946B
INCOROP2       2 00001502 00000001  I                   1936  1924B
INCOROP3       6 0000151E 00000001  I                   1944  1925B
INCOROP4       2 000014F4 00000001  I                   1931  1927B
INCOROP5       2 000014D6 00000001  I                   1922  1934B
INITEND        4 00000232 00000001  I                    299   297B
INLIT2         4 000001F4 00000001  I                    281   273B
INTCON         4 000019F8 00000001  I                   2354  2138B 2144B
INTCON1        2 00001A0E 00000001  I                   2359  2355B
INTCON2        4 00001A22 00000001  I                   2365  2356B 2358B
INTERUPT       4 00001F42 00000001  I                   2765   137
INTHAN         4 00001B6E 00000001  I                   2465  2363B
INTHANA        6 00001B7A 00000001  I                   2468  2466B
INTHANR        4 00001B80 00000001  I                   2469  2562B
INTHAN1        4 00001BCC 00000001  I                   2491  2479B 2507B 2513B 2538B 2545B 2566B 2585B 2593B 2605B 2625B
                                                              2632B
INTHAN10       2 00001C06 00000001  I                   2509  2504B
INTHAN11       4 00001C72 00000001  I                   2540  2526B
INTHAN2        4 00001BA2 00000001  I                   2478  2470B
INTHAN3        2 00001BE8 00000001  I                   2498  2487B
INTHAN4        4 00001BF0 00000001  I                   2502  2506B
INTHAN5        4 00001C2A 00000001  I                   2520  2518B
INTHAN6        4 00001BC2 00000001  I                   2487  2480
INTHAN7        4 00001C0A 00000001  I                   2511  2523B
INTHAN8        6 00001C3A 00000001  I                   2525  2516B
INTHAN9        4 00001C16 00000001  I                   2515  2500B
INTPACK        6 00001A44 00000001  I                   2374  2360X
INVOP          2 00001F78 00000001  H H                 2790   358   813  2124  2304
IOBYTE         1 000020B5 00000001  C C                 2892  1795  1804M 1854  1899M 2014  2024M 2029  2075M
ITABMEX        6 000014C8 00000001  I                   1914  1816X
ITABMOP        4 0000134E 00000001  I                   1793   377B  407B  440B  764B
ITABMOVE       4 00001352 00000001  I                   1794   302B  365B  398B
ITABM2         6 000013D2 00000001  I                   1835  1832B
ITABM3         6 000013D8 00000001  I                   1836  1831B
ITABM4         6 000013DE 00000001  I                   1837  1830B
ITABM5         6 000013E4 00000001  I                   1838  1829B
ITABM6         6 000013EA 00000001  I                   1839  1828B
ITABM7         6 000013F0 00000001  I                   1840  1827B
ITABM8         1 000013F6 00000001  U                   1841  1826B
ITABOVER       2 00001F8C 00000001  H H                 2800  1906
ITABREAD       4 000014BC 00000001  I                   1910   217B
ITAB1          4 000013F6 00000001  I                   1843  1811B
ITAB10         4 000014A6 00000001  I                   1904  1853B
ITAB30S        4 000000EC FFFFFFFF  F F                 3393   146   166   197
```

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Symbol    Length    Value     Id    Type Asm  Program   Defn  References                      X390 3.1.04  2012/08/17 13.13

ITAB4          4 00001370 00000001  I                    1805  1796B
ITAB5          1 00001440 00000001  U                    1864  1856B
ITAB6          4 00001462 00000001  I                    1880  1855B 1912B
ITAB7          4 0000149A 00000001  I                    1900  1849B
KBN            2 000000A0 FFFFFFFF  H H                  3361   292M 2493  2643M
KH1            2 00001F5A 00000001  H H                  2772   529  2435
KH10           2 00001F64 00000001  H H                  2777   255  2354  2431
KH11           2 00001F66 00000001  H H                  2778   931
KH12           2 00001F68 00000001  H H                  2779   223  1656  1964  1966  2317  2319
KH15           2 00001F6A 00000001  H H                  2780   698  2469
KH1792         2 00001F74 00000001  H H                  2785  1820  1821
KH18           2 00001F6C 00000001  H H                  2781  1702
KH255          2 00001F72 00000001  H H                  2784  1672  2525  2614
KH4096         2 00001F76 00000001  H H                  2786   145   164   282
KH5            2 00001F5C 00000001  H H                  2773  1397  1974
KH64           2 00001F70 00000001  H H                  2783  2412  2428
KH7            2 00001F5E 00000001  H H                  2774   737
KH8            2 00001F60 00000001  H H                  2775   153
KH9            2 00001F62 00000001  H H                  2776   241   981  1017  1272  1313  1364  1553  2084  2385  2432
KP1            1 00001F40 00000001  P P                  2763  2733
LATBEG         1 0000006C           U                    3363  3364
LATNR          1 0000001C           U                    3362  3363
LBETA1         4 00000340 00000001  I                     374   367B
LBETA2         4 00000320 00000001  I                     366   438B
LBETA3         6 00000328 00000001  I                     368   375B
LBETA4         4 00000348 00000001  I                     377   364B
LCOMMA1        4 0000074A 00000001  I                     714   699B
LCOMMA2        4 00000752 00000001  I                     717   701B
LCOMMA3        4 00000756 00000001  I                     718   705B
LCOMMA4        4 00000732 00000001  I                     707   719B
LDO1           4 00000446 00000001  I                     461   456B
LDO2           6 00000438 00000001  I                     457   462B  682B  712B
LDO3           4 00000430 00000001  I                     454   455   468B  474B  657B  659B  661B  663B  697B  715B  728B
                                                                740B  745B
LETRAF         4 00000E18 00000001  I                    1341   894B 1149B
LETRAF1        2 00000E22 00000001  I                    1344  1369B
LETRAF2        4 00000E78 00000001  I                    1364  1348B 1368B
LETRAF3        4 00000E90 00000001  I                    1371  1362B
LETRAF4        4 00000EB4 00000001  I                    1381  1354B
LETRAF5        4 00000E5C 00000001  I                    1358  1351B
LETRAF6        4 00000E74 00000001  I                    1363  1379B
LETTER         4 000007DA 00000001  I                     767   309B  363   383   393M  394B  432  1793M
LETTERP        4 000007DE 00000001  I                     768   765B
LETTER0        4 0000082E 00000001  I                     793   774B
LETTER1        4 0000080C 00000001  I                     783   843B  884B  889B  891B  893B  895B  898B  909B  917B  919B
                                                                940B  947B  977B  987B  992B 1003B 1010B 1019B 1036B 1043B
                                                               1050B 1062B 1064B 1067B 1942B
LETTER2        4 00000826 00000001  I                     790   785B
LETTER3        6 00000818 00000001  I                     786   791B
LETTER4        2 000007E6 00000001  I                     770   800B
LETTER5        4 000007D2 00000001  I                     764   767B
LETTER6        6 000007EC 00000001  I                     773   794B
LFOR1          4 000003EA 00000001  I                     427   421B
LFOR3          6 000003CA 00000001  I                     419   447B  449B
LFOR4          6 000003D8 00000001  I                     422   428B
LGAMMA1        4 00000646 00000001  I                     641   634B
LGAMMA2        4 00000630 00000001  I                     635   642B
LNG            1 00000002           U                    3302   272  2555
LOMEGA1        4 000005EA 00000001  I                     613   530B
LOMEGA11       6 00000608 00000001  I                     622   625B
LOMEGA12       4 0000061A 00000001  I                     626   621B
LOMEGA2        1 00000530 00000001  U                     550   547B
LOMEGA3        4 0000051A 00000001  I                     543   627B 1734B 1908B 1986B
LOMEGA4        4 000005A2 00000001  I                     581   561B  573B  575B
LOMEGA5        4 00000574 00000001  I                     569   563B
LOMEGA6        4 000004E0 00000001  I                     519   129   511B
LOPBRA3        4 000006B0 00000001  I                     672   685B
LOPBRA4        4 000006E4 00000001  I                     684   665B  669B
LOPBRA5        4 000006EC 00000001  I                     687   652B
LOUCHAF        4 000011B0 00000001  I                    1641  1728M
LOUCHAL        4 0000128E 00000001  I                    1709  1705M
LOUCHAM        6 00001284 00000001  I                    1707  1704M
LOUCHA1        4 00001264 00000001  I                    1698  1650B
LOUCHA2        4 000012BC 00000001  I                    1721  1703B
LOUCHA4        4 000011D8 00000001  I                    1655  1712B 1719B
LOUCHA5        4 000011CC 00000001  I                    1651  1701B 1726B
LOUCHA6        6 000011C2 00000001  I                    1649  1729B
LOUCHA7        4 000012D2 00000001  I                    1728  1641B
LOUCHA8        6 000012DA 00000001  I                    1731  1673B
LPIPHI1        4 000003A0 00000001  I                     404   387B
LPIPHI2        6 0000036A 00000001  I                     388   405B
LPIPHI3        4 00000378 00000001  I                     391   402B
LPIPHI4        4 00000388 00000001  I                     396   392B
LPIPHI5        4 00000398 00000001  I                     401   397B
LPIPHI6        4 000003A8 00000001  I                     407   384B
LQUOT1         4 000002E8 00000001  I                     350   343B
LQUOT2         4 000002E0 00000001  I                     347   339B
LQUOT3         6 000002C6 00000001  I                     340   348B
LQUOT4         6 000002FC 00000001  I                     355   351B
LQUOT5         4 000002D8 00000001  I                     344   354B
LREAL          4 00002128 00000001  F F                  2923   275M 2521  2533
LSEM1          4 000004A2 00000001  I                     496   489B
LSEM2          6 0000048C 00000001  I                     490   497B
LVCNT          2 00001FC4 00000001  H H                  2822   556  1355  1357M
LVCOUNT        2 0000057A FFFFFFFF  H H                  3575   556M
LVKEY          4 00001FBC 00000001  C C                  2820   264
LVLENGTH       4 00001FC0 00000001  F F                  2821   569  1353  1375  1377M
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Symbol    Length    Value     Id     Type Asm  Program    Defn  References                     X390 3.1.04  2012/08/17 13.13

LVSTRT         4 00001FB8 00000001  A A                  2819   178M  263   577  1372
LVTAB30S       4 000000F8 FFFFFFFF  F F                  3396   152   267   578  1373  1376
LVTAB40S       4 00000104 FFFFFFFF  F F                  3399  1353
MANYCON        2 00001F84 00000001  H H                  2796  2542  2629
MAXINT        10 0000213B 00000001  X X                  2934  2357
MOVE           2 000015B0 00000001  I                    1997   798B  812B  826B 1932B 1937B 1990B 2112B 2116B 2120B 2127B
                                                               2140B 2210B 2219B 2273B 2283B 2299B 2342B 2371B
MOVEEX         6 000015D0 00000001  I                    2012  2002X 2008X
MOVEP          2 0000159A 00000001  I                    1988  2213B 2226B
MOVERRO        4 0000152C 00000001  I                    1959   840B  866B  946B 1382B 1637B 1733B 1907B 1940B 2368B 2397B
                                                               2453B 2459B 2543B 2630B
MOVERROM       6 00001578 00000001  I                    1978  1976M
MOVERRO1       4 0000154C 00000001  I                    1967  1965B
MOVERRO2       4 00001580 00000001  I                    1981  1961B
MOVERRO3       2 0000157E 00000001  I                    1979  1975B
MOVE1          2 000015C4 00000001  I                    2006  2001B
NDECK          1 00000020           U                    3320  2658  2698  2700
NEXTERR        4 000000C0 FFFFFFFF  A A                  3375  1959  1969M 1985M
NLOAD          1 00000040           U                    3317  2658  2698
NOCOUNT        1 00000080           U                     105   481  1118  2554
NOCRI          4 00000930 00000001  I                     883   878B
NOCRI1         4 00000962 00000001  I                     897   886B
NORMAL         1 000000F0           U                     108   914  1001  1034  1066  1156  1194  1237
NOSC           1 00000008           U                    3342   299   509
NOSUOP         1 00000040           U                     106  1347  2083
NOTER          4 000020BC 00000001  F F                  2894  1873M 1876  2045M
NOTEW          4 000020B8 00000001  F F                  2893   206M 1871M 2047M 2050
NREAL          4 0000212C 00000001  F F                  2924   277M 2393
NSTART         4 00002120 00000001  A A                  2921  2134  2205  2214  2227  2370  2377
NUMBER         1 00002082 00000001  U                    2881  1993  2094  2095  2143  2149  2150  2186  2187  2237  2332
                                                               2352  2442  2446  2921
OLDFSN         1 00000F5F 00000001  U                    1442  1426M
OLDSPIE        4 00002160 00000001  A A                  2941   141M  600  2767
OMEGA          6 000004C0 00000001  I                     508   328B
ONEELEM        6 00002062 00000001  X X                  2870  1450  1472
ONERM          6 00000622 00000001  I                     629   626X
OPBRACK        4 00000656 00000001  I                     651   323B
OPERANDR       4 0000107C 00000001  I                    1540  1404B 1459B 1493B 1578B
OPERAND1       4 00001098 00000001  I                    1551  1545B
OPERAND2       4 000010A0 00000001  I                    1553  1555B
OPERAND3       4 000010AE 00000001  I                    1557  1564B
OPERAND4       2 00001094 00000001  I                    1546  1560B
OPSTART        4 000020A8 00000001  A A                  2882   837   863   943  1939  2321  2349
OTHER          4 0000172C 00000001  I                    2134  2110B
OTHER1         4 0000173C 00000001  I                    2140  2135B
OTHOP          4 00000430 00000001  U                     455   329B  479B  482B  500B  504B  654B  690B  695B  726B  753B
OTHOP0         4 000017A8 00000001  I                    2175  2166B
OTHOP01        6 000017B4 00000001  I                    2178  2176B
OUCHA          4 000011AC 00000001  I                    1640   347B  374B  404B  427B  461B  496B  532B  641B  790B 2177B
                                                               2467B 2549B
OUTAREA2       4 000000AC FFFFFFFF  F F                  3367  2715  2725M
PAGEHD1      121 0000010C FFFFFFFF  C C                  3406  3407  3411
PAGEHD2      121 00000185 FFFFFFFF  C C                  3416  3417
PAGEHD3      121 000001FE FFFFFFFF  C C                  3423  3424
PBN            2 0000009E FFFFFFFF  H H                  3360   291  1848
PBTAB1       255 00000478 FFFFFFFF  C C                  3503  3504
PFA            4 000020C0 00000001  A A                  2898   243M  660   888   916   978  1015  1105  1127M 1244  1250M
                                                               1260  1281M 1295  1311  1343  1439  1551  2079
PFAMAX         4 000020C8 00000001  A A                  2900   245M 1111  1140
PFANO          4 000020C4 00000001  A A                  2899   242M  660   888   916  1018  1131  1147  1249  1262  1295
                                                               1365  2085
PIDENT         4 000000B0 FFFFFFFF  C C                  3368  2732
PIPHI          4 00000350 00000001  I                     382   316B
PIPHI1         6 0000035C 00000001  I                     385   408B
PRECERR        1 00000008           U                      94  2312  2398
PRECREAL       2 00001F80 00000001  H H                  2794  2396
PRELPOOL       1 00000278 FFFFFFFF  C C                  3441  3374  3375  3442  3500
PROC           1 00000004           U                    3299   300
PROFU          4 0000096A 00000001  I                     908   879B
PROFU1         4 00000988 00000001  I                     915   912B
PRPT           4 000000A4 FFFFFFFF  F F                  3365   285  2657  2662M
PUNCHOUT       1 00001EB6 00000001  U                    2728  2712B
PUTCHAIN       4 00000B52 00000001  I                    1076  1023B
PUT1           2 00001E7A 00000001  I                    2706  2702B
PUT1A          4 00001E76 00000001  I                    2703  2726B
QTORLT         4 00001702 00000001  I                    2120  2107B 2161B
QTORLTP        4 00001820 00000001  I                    2210  2198B
QTORLT1        4 00001708 00000001  I                    2122  1995B 2211B
QUOTE          4 000002BE 00000001  I                     338   314B
RANGEINT       2 00001F7E 00000001  H H                  2793  2367
RANGEREA       2 00001F7C 00000001  H H                  2792  2452  2458
READC          1 00000020           U                     100  1804  1854  2029
READM          1 00000080           U                      98  1795  1899
REALCON        2 00001A4A 00000001  I                    2376  2228B 2295B 2372B
REALCONA       4 00001B08 00000001  I                    2436  2433B
REALCON1       4 00001AF6 00000001  I                    2431  2386B
REALCON2       6 00001A6A 00000001  I                    2389  2444B
REALCON3       2 00001AA0 00000001  I                    2405  2394B 2399B
REALCON5       4 00001AE4 00000001  I                    2425  2413B
REALCON6       4 00001AB6 00000001  I                    2412  2410B 2429B
REALCON7       2 00001A9A 00000001  I                    2403  2378B
REALCON8       4 00001ACA 00000001  I                    2417  2415B
REALCON9       2 00001ADA 00000001  I                    2421  2419B
REALERR        4 00001B36 00000001  I                    2448  2766B
REALERR1       4 00001B58 00000001  I                    2457  2422B 2427B
REALH          4 00001CD0 00000001  I                    2564  2556B
REALHAN        4 00001C8C 00000001  I                    2547  2230B 2404B 2406B 2423B 2448  2461B
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Symbol    Length    Value     Id      Type Asm  Program    Defn  References                        X390 3.1.04  2012/08/17 13.13

REALHANA       6 00001C98 00000001  I                      2550  2548B
REALHAN1       4 00001CAE 00000001  I                      2555  2552B
REALH10        6 00001D66 00000001  I                      2614  2589B 2609B
REALH11        4 00001D98 00000001  I                      2627  2615B
REALH2         4 00001D3C 00000001  I                      2600  2573B
REALH21        4 00001D42 00000001  I                      2602  2600
REALH22        2 00001D50 00000001  I                      2607  2602B
REALH3         4 00001CF8 00000001  I                      2576  2575
REALH4         4 00001D02 00000001  I                      2580  2576B
REALH5         4 00001D08 00000001  I                      2582  2580
REALH6         2 00001D16 00000001  I                      2587  2582B
REALH7         4 00001D2E 00000001  I                      2595  2612B
REALH8         2 00001D20 00000001  I                      2590  2598B
REALH9         2 00001D32 00000001  I                      2596  2611B
REGSAVE        4 00002168 00000001  F F                    2943  1640M 1695  1745M 1772  1778M 1794M 1900  1910M 2016M 2025
                                                                 2028M 2076
REPACK         6 00001B30 00000001  I                      2446  2388X 2436X
RHO            4 00000842 00000001  I                       805   330B  778B 2109B 2165B
RITAB          4 00001470 00000001  F F                    1886  1799  2034
ROUND          8 00002110 00000001  X X                    2918  2558M 2559
R0             1 00000000           U                      3677   145M  146M  147M  148M  149M  150M  151M  152M  153M  154
                                                                  357M  592M  674M  675   676M  677   769M  831M  832M  836
                                                                  867  1921M 2000  2006  2009  2055M 2068  2095M 2150M 2187M
                                                                 2241M 2332M 2680M 2681  2685  2687  2688
R1             1 00000001           U                      3678   141   163   164M  165   166M  167   168M  169   170M  171
                                                                  172M  173   174M  175   176M  177M  178   190M  191   192
                                                                  193   197M  198   199M  205   206   240M  241M  242   243
                                                                  244M  245   253M  254   255M  256   257   258M  259   263M
                                                                  264   265   266   267M  268   281M  283   285M  286   287
                                                                  288   289M  290   557M  558M  559M  560   569M  570M  571M
                                                                  572   593M  600M  614M  622   623M  629   772M  775   830M
                                                                  930M  931M  932   934   937M  959   978M  979   981M  986
                                                                  989   997   999  1002  1004  1005M 1006M 1016M 1017M 1018
                                                                 1020  1030  1032  1035  1037  1038M 1039M 1047  1049  1051
                                                                 1052M 1053M 1057  1059  1077  1079  1086  1196M 1197M 1203
                                                                 1210  1220  1298M 1299M 1300  1302  1304  1306M 1314  1343M
                                                                 1344  1346  1359  1364M 1365  1367  1395M 1399  1401M 1402
                                                                 1405  1407  1420  1449  1456  1458M 1460  1462  1471  1478
                                                                 1488  1490  1492M 1494  1540  1542  1544  1554  1575  1577M
                                                                 1582  1600M 1601  1609M 1610  1612  1613  1614  1615  1616
                                                                 1619  1622  1623  1624  1865M 1871  1872M 1931M 1936M 1997M
                                                                 1999  2002  2039M 2045  2046M 2099M 2101  2103  2113  2117
                                                                 2121  2128  2130M 2141  2142M 2146M 2153M 2155  2157  2172M
                                                                 2183M 2191M 2193  2195  2222M 2232M 2245M 2247  2249  2275M
                                                                 2307M 2338M 2339M 2341M 2366  2407M 2417M 2418M 2420  2450
                                                                 2484M 2485M 2487M 2488  2491M 2492  2502M 2503  2505  2509M
                                                                 2512  2530M 2531  2532  2536  2537  2540  2541  2564M 2569M
                                                                 2576M 2577  2581M 2582M 2583  2592  2602M 2603  2619M 2620
                                                                 2623  2624  2674M 2675  2677  2680  2686  2688M 2701M 2703M
                                                                 2706  2710  2716M 2717  2718M 2721  2725  2729  2730  2731
                                                                 2732  2734  2735  2736  2737  2738  2739  2755  2765
R10            1 0000000A           U                      3687   118U  119M
R11            1 0000000B           U                      3688   118U  120M  121M  122
R12            1 0000000C           U                      3689   118U  122M  123M
R13            1 0000000D           U                      3690   125U
R14            1 0000000E           U                      3691   548M  897M 1014M 1128B 1134B 1158B 1311M 1312M 1313M 1314
                                                                 1317  1320  1326  1328  1329M 1330M 1438M 1464M 1487M 1522M
                                                                 1584B 1589B 1625B 1634B 1640  1695M 1745  1772M 1778  1794
                                                                 1900M 1910  2016  2025M 2028  2076M 2455B 2480M 2489B 2519M
                                                                 2528M 2529M 2575M 2578B 2580M 2584B 2595M 2600M 2604B 2617M
                                                                 2618M 2644B 2648  2660M 2663M 2664B 2671  2672M 2682  2684
                                                                 2689M 2692M 2697  2711M 2715M 2717
R15            1 0000000F           U                      3692   114   119   120   186M  217M  298M  302M  347M  352M  365M
                                                                  374M  377M  398M  401M  404M  407M  427M  440M  448M  461M
                                                                  496M  532M  567M  579M  641M  646M  666M  718M  747M  764M
                                                                  790M  798M  799M  812M  826M  840M  866M  918M  946M 1023M
                                                                 1087B 1130M 1152M 1221B 1251B 1282B 1296B 1301B 1374M 1381M
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                                                                 1637M 1696B 1721M 1733M 1776B 1902B 1907M 1932M 1933M 1937M
                                                                 1940M 1979B 1992B 2004B 2010B 2077B 2092B 2112M 2116M 2120M
                                                                 2127M 2129M 2140M 2171M 2177M 2210M 2213M 2219M 2220M 2226M
                                                                 2273M 2274M 2283M 2299M 2342M 2368M 2371M 2397M 2453M 2459M
                                                                 2467M 2543M 2549M 2630M 2636M 2637  2638M 2639  2640M 2641M
                                                                 2642  2643  2679M 2681M 2682  2684M 2685M 2686  2687M 2689
                                                                 2753M 2754  2756  2757  2768M 2769B
R2             1 00000002           U                      3679   306M  308   615M  622   624M  629   771M  776   936M  938
                                                                  952   953   954   961M 1169M 1170  1172  1173  1175  1177
                                                                 1181M 1184  1188  1196  1199  1201  1205  1206  1208  1212
                                                                 1213  1214  1216M 1297M 1300  1344M 1367  1418  1423M 1430M
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                                                                 1552M 1553M 1554  1557  1559  1561  1562M 1563M 1576  1579
                                                                 1583M 1586  1591  1592M 1613  1623  1640  1695M 1745  1772M
                                                                 1778  1794  1900M 1910  2016  2025M 2028  2076M 2100M 2104
                                                                 2123M 2154M 2159  2192M 2196  2246M 2250  2303M 2313B 2350B
                                                                 2362M 2395M 2408M 2411M 2416  2420  2425  2451M 2457M 2469
                                                                 2471M 2472  2488  2505  2512  2537  2561M 2649M 2650M 2652
                                                                 2755  2757M
R3             1 00000003           U                      3680   182M  183   305M  307   340   341M  342   350   353   368
                                                                  370   371M  385   388   390M  391   396   419   422   424M
                                                                  457   486   490   492M  508   636   637M  770   773   775M
                                                                  793M  890   984  1773M 1775  1904  1905  1922  1923  1926
                                                                 1928M 1931  1936  1944  1945M 1988  2089  2090  2097  2099
                                                                 2103M 2130  2131  2136  2153  2157M 2158  2172  2190  2191
                                                                 2195M 2203  2221  2222  2244  2245  2249M 2269  2275  2276
                                                                 2627  2628  2673M 2675  2677  2729  2736  2737
R4             1 00000004           U                      3681   221M  224   236M  338   340   344M  366   368   369M  386
                                                                  388   389M  420   422   423M  454   457   458M  488   490
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Symbol    Length    Value      Id      Type Asm  Program    Defn  References                       X390 3.1.04  2012/08/17 13.13

                                                                   491M  508   531M  633   635   636   638M  674   704   710
                                                                   733   742   784   786   787M  805   807  1297  1396  1651
                                                                  1652M 1653  1654M 1699  1709M 2175  2178  2179  2180M 2465
                                                                  2468  2473  2474  2475M 2493  2494  2495M 2547  2550  2671M
                                                                  2693B
R5              1 00000005            U                     3682   127M  128   129M  130   161M  162   193M  194   195M  196
                                                                   207M  213   222M  223M  224M  225   226M  227   228M  229
                                                                   230M  231   232M  233   234M  235   248M  249   274M  275
                                                                   276M  277   282M  283M  284   413M  414M  415   417M  418
                                                                   466M  467   472M  473   480M  481   519M  525   544M  545M
                                                                   546   552M  553M  554   564M  565M  576M  577M  581M  582M
                                                                   588   616M  617M  618   626   687M  688M  689   750M  751M
                                                                   752   833M  835B  874M  875M  876M  877   913M  914   952M
                                                                   953M  954M  955M  956   958   960   988M  989M  990M  991
                                                                   996M  997M  998M 1001  1009  1029M 1030M 1031M 1034  1042
                                                                  1056M 1057M 1058M 1063  1066  1079M 1080M 1081  1083M 1084M
                                                                  1085  1117M 1118  1122M 1123M 1124  1138M 1139  1155M 1156
                                                                  1178M 1179M 1180  1185M 1186M 1187  1188  1191M 1192M 1193M
                                                                  1194  1202M 1203M 1204  1209M 1210M 1211  1233M 1235  1238
                                                                  1240  1244  1246M 1269M 1270M 1271  1275M 1277M 1278  1319M
                                                                  1321  1345M 1347  1352M 1355M 1356M 1357  1371M 1372M 1375M
                                                                  1376M 1377  1396M 1397M 1398  1424M 1425M 1426  1427  1431
                                                                  1499M 1500M 1501  1505M 1506M 1508  1511  1525M 1526M 1527
                                                                  1585M 1586M 1587  1591M 1593  1603M 1606M 1607M 1608  1626M
                                                                  1627M 1630M 1631M 1632  1655M 1656M 1657M 1658  1659M 1660
                                                                  1661M 1662  1663M 1664  1665M 1666  1667M 1668  1671M 1672
                                                                  1674M 1675  1676M 1689  1698M 1700  1707  1708  1713M 1716
                                                                  1717  1723M 1724M 1725  1753M 1766  1817M 1818  1819M 1821M
                                                                  1833  1835  1836  1837  1838  1839  1840  1843M 1844M 1845
                                                                  1846M 1847  1851M 1852  1880M 1893  1959M 1960  1968M 1969
                                                                  1970M 1971  1972  1973  1978  1981  1982  1983  1984M 1985
                                                                  1988M 1989M 1993M 1994  1998M 1999M 2000  2003  2006M 2007M
                                                                  2008  2015B 2026B 2069  2079M 2081  2084M 2085  2290M 2291
                                                                  2314M 2315M 2317  2319M 2320  2321M 2322  2324  2344M 2345
                                                                  2347  2390M 2391  2438M 2439  2448M 2449  2553M 2554  2651M
                                                                  2652M 2653  2654M 2655M 2656  2666  2767M 2768
R6              1 00000006            U                     3683   416M  417   434M  435M  436   437   566M  578M  618M  619M
                                                                   620M  625M 1078M 1080  1084  1234M 1235M 1236M 1237  1241M
                                                                  1242M 1243  1349M 1350  1358M 1359  1360  1361  1363  1373M
                                                                  1378M 1427M 1428  1431M 1432  1436  1501M 1502  1508M 1509
                                                                  1511M 1512  1516  1520  1527M 1528  1587M 1588  1628M 1653M
                                                                  1657  1670  1677M 1690  1699M 1700M 1702  1704  1705  1706M
                                                                  1707  1709  1710  1711  1714M 1715M 1716  1718M 1754M 1767
                                                                  1815M 1816  1817  1822M 1823M 1824  1881M 1894  1962M 1963M
                                                                  1964  1966M 1967M 1968  1970  1971  1974M 1976  1977M 1978
                                                                  2056M 2070  2080M 2081M 2082M 2083  2376M 2377M 2383  2393
                                                                  2567M 2568  2569  2574  2581  2582  2587  2590  2601  2602
                                                                  2607  2648  2657M 2662  2663M 2666M 2738  2756M
R7              1 00000007            U                     3684   655M  656   658   673   702M  703M  704   707M  708M  709
                                                                   710M  711   731M  732M  733   736M  737M  738   739   741
                                                                   742M  743   783   786   829M  834   836M  842M  847   849
                                                                   855   857   867M  874   892   930   979  1103  1115  1120
                                                                  1122  1126  1136  1360  1457M 1467  1475  1476M 1481  1495M
                                                                  1497M 1500  1503  1805M 1806  1807  1810  1818M 1820M 1833
                                                                  1835  1836  1837  1838  1839  1840  1914  1941M 1991M 1993
                                                                  2096M 2113M 2117M 2121M 2122  2128M 2136M 2137M 2141M 2151M
                                                                  2188M 2207M 2225  2235M 2239  2291M 2354  2359M 2360  2369
                                                                  2384M 2405  2409M 2435M 2483M 2499  2503  2510  2521M 2522
                                                                  2532M 2533M 2535  2571M 2572  2574M 2587M 2588  2590M 2591
                                                                  2596  2601M 2607M 2608  2610  2620M 2621  2622
R8              1 00000008            U                     3685   356M  667M  668   670   671M  672   673   678   679   684M
                                                                   768M  827   838   864   944  1015M 1016  1020  1024  1076
                                                                  1082  1083  1105M 1111  1113M 1114  1120  1121  1125  1127
                                                                  1131  1140  1142M 1144  1147  1170  1214  1220M 1249M 1250
                                                                  1260M 1261  1262  1264  1266  1268  1272M 1276  1281  1418M
                                                                  1422M 1425  1439  1441M 1443  1470M 1475M 1481M 1503  1506
                                                                  1526  1576M 1579  1592  1593M 1612  1808M 1809M 1810  1819
                                                                  1848  1850  1901  1911M 1914  1938  1994  1998  2003M 2007
                                                                  2009M 2012  2094M 2134  2142  2149M 2186M 2205  2214  2227
                                                                  2237M 2238  2240M 2284M 2285  2293  2294M 2300M 2301  2302M
                                                                  2323M 2324  2326M 2333  2336M 2337M 2345  2347M 2348  2370M
                                                                  2376  2481M 2485  2486  2487  2498  2568M 2576  2596M 2597
R9              1 00000009            U                     3686   543M  544   706M  735M  770M  894M  935M  938  1149M 1195M
                                                                  1197  1213  1217M 1342B 1366B 1383B 1403B 1414B 1440B 1482B
                                                                  1523B 1529B 1922M 1989  1997  2012  2097M 2131M 2137  2143M
                                                                  2158M 2190M 2203  2221M 2244M 2276M 2340M 2341  2357  2365
                                                                  2374  2383M 2384  2385  2387M 2388  2405M 2407  2412  2414M
                                                                  2416  2428M 2431M 2432  2434M 2436  2442M 2443  2482M 2486M
                                                                  2498M 2499  2509  2510M 2511  2515  2517  2520M 2527M 2531M
                                                                  2534  2570M 2572  2616M 2651  2654
SARRAY          1 00000080            U                       84   502   651   723   851
SAVELT          4 00001E90 00000001   F F                   2714  2697M 2711
SAVOUTA         4 000000A8 FFFFFFFF   F F                   3366  2674  2710M 2716
SCAFAC          2 0000244E 00000001   X X                   3014  2247
SCAFACT         2 0000186C 00000001   I                     2235   313B
SCAFACTM        4 000016F8 00000001   I                     2116  2106B
SCAL            4 00001964 00000001   I                     2307  2248B
SCALE           1 0000213A 00000001   U                     2932  2243M 2269M 2287
SCALEMSK        4 00002124 00000001   X X                   2922  2414  2418
SCALEQ          1 00002139 00000001   R A                   2931  2333  2932
SCAOT           4 000018FE 00000001   I                     2279  2256B 2268B
SCAOT1          4 00001934 00000001   I                     2293  2282B
SCAPACK         6 00001940 00000001   I                     2297  2285X
SCAQL           4 00001946 00000001   I                     2299  2254B 2280B
SCASIGN         1 000018D8 00000001   U                     2266  2253B
SCATEST         1 00002138 00000001   C C                   2930  2098M 2152M 2189M 2242M 2258M 2261  2263M 2267  2270M 2279
                                                                  2281  2312  2330  2334  2398M
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Symbol    Length    Value     Id     Type Asm  Program    Defn  References                        X390 3.1.04  2012/08/17 13.13

SCAWORK        1 00002145 00000001  X X                 2935  2240  2241  2297  2340  2939
SCAWORKA       4 0000215C 00000001  A A                 2939  2284  2300
SCAZERO        4 000018C8 00000001  I                   2261  2252B
SCAZETA        4 000018EE 00000001  I                   2273  2255B
SCA0           4 00001796 00000001  I                   2168  2163B
SCA1           4 00001876 00000001  I                   2238  2118B 2169B 2215B 2217B
SCA19          4 000018C0 00000001  I                   2258  2251B
SCA2           4 00001892 00000001  I                   2245  2259B 2262B
SCA20          4 0000188E 00000001  I                   2244  2264B 2271B
SCA3           2 00001896 00000001  I                   2246  2277B
SCA4           6 00001898 00000001  I                   2247  2308B
SEMCNT         2 0000009C FFFFFFFF  H H                 3359   131M  486M 1973  1983
SEMIDELT       6 0000047A 00000001  I                    486   322B
SF             1 00000010           U                     91  2330
SFDIGIT        1 00000060           U                     92  2279
SFLSIGN        1 000000E0           U                     93  2267
SFL0           1 00000040           U                     89  2263
SFSIGN         1 00000080           U                     88  2270  2334
SF19           1 00000020           U                     90  2258  2261  2281
SPECUSE        4 0000217C 00000001  X X                 2944   875
SPIC           1 00000040           U                   3339   184   296   510   533   613
SPTAB        255 000005D0 FFFFFFFF  C C                 3562  1431  1511
SRCE1ADD       4 000000C8 FFFFFFFF  F F                 3377   182   614
SRCE1S         4 000000E0 FFFFFFFF  F F                 3389   147   168   616  3390
SRCE3S         4 000000E0 FFFFFFFF  U                   3390   148   149   170   172   222  1655
SREAD          4 0000130C 00000001  F F                 1759   514  1748
SREF           1 00002136 00000001  P P                 2928  2286  2289  2361  2389  2437
SSWITCH        1 00000040           U                     85   499   941
STATUS         1 000020AE 00000001  X X                 2885   493M  499M  502M  651   723   851   941
STEP           4 0000045A 00000001  I                    472   331B
STEPM          1 00000008           U                    109   473
SUBAST         4 00000FE0 00000001  I                   1487  1409B
SUBEND         4 0000204C 00000001  A A                 2866  1398M 1402  1405  1460  1488
SUBFIN         2 00001004 00000001  I                   1497  1465B 1473B
SUBFIN1        2 0000101E 00000001  I                   1505  1452B 1498B
SUBFIN2        4 00001054 00000001  I                   1518  1515B
SUBFIN3        4 00001066 00000001  I                   1522  1519B
SUBFIN4        2 0000106C 00000001  I                   1525  1483B 1504B 1510B 1513B 1517B 1521B 1638B
SUBMULT        6 000010CE 00000001  I                   1575  1464B 1487B
SUBMULT1       2 000010EE 00000001  I                   1583  1594B
SUBMULT2       2 00001102 00000001  I                   1591  1580B
SUBNOOP        4 00000EF6 00000001  I                   1413  1463B 1491B 1541B 1543B 1581B
SUBONE         2 00000EFC 00000001  I                   1418  1406B
SUBONE1        2 00000F16 00000001  I                   1424  1445B
SUBONE2        4 00000F54 00000001  I                   1439  1429B 1433B 1437B 1444B
SUBONE3        6 00000F6A 00000001  I                   1449  1419B
SUBONE4        4 00000F50 00000001  I                   1438  1435B
SUBONE5        6 00000F76 00000001  I                   1451  1489B
SUBPM          6 00000F80 00000001  I                   1456  1408B
SUBPM1         2 00000FA8 00000001  I                   1467  1461B
SUBPM2         6 00000FBA 00000001  I                   1472  1479B
SUBPM3         2 00000FC4 00000001  I                   1475  1468B
SUBPM4         2 00000FD8 00000001  I                   1481  1469B
SUB1           4 00000ED8 00000001  I                   1402  1400B
SUCNT          2 00001FA8 00000001  H H                 2812   555  1606  1608M
SUCOUNT        2 0000057C FFFFFFFF  H H                 3576   555M
SUCRIDEL       6 00000D9E 00000001  I                   1295   666B  718B  747B 1413B 1721B
SUCRID1        4 00000DAE 00000001  I                   1299  1303B
SUCRID2        2 00000DB2 00000001  I                   1300  1307B
SUCRID3        4 00000DC6 00000001  I                   1306  1322B 1327B
SUCRID4        4 00000DCE 00000001  I                   1311  1305B
SUCRID5        4 00000DD6 00000001  I                   1313  1315B
SUCRID6        4 00000DE4 00000001  I                   1317  1331B
SUCRID7        4 00000DFE 00000001  I                   1326  1318B
SUKEY          4 00001FA0 00000001  C C                 2810   254
SULENGTH       4 00001FA4 00000001  F F                 2811   557  1604  1630  1632M
SULTSTRT       4 000000D0 FFFFFFFF  F F                 3379   205M
SUSCRITE       4 00000EBE 00000001  I                   1395   706B  735B
SUSTRT         4 00001F9C 00000001  A A                 2809   175M  253   565  1627
SUTABENT       4 0000110C 00000001  I                   1600  1438B 1522B
SUTAB1         4 00001132 00000001  I                   1609  1602B
SUTAB2         4 00001164 00000001  I                   1620  1618B
SUTAB3         6 00001170 00000001  I                   1623  1621B
SUTAB30S       4 000000F4 FFFFFFFF  F F                 3395   151   176   258   566  1628  1631
SUTAB4         4 000011A0 00000001  I                   1636  1605B
SUTAB40S       4 00000100 FFFFFFFF  F F                 3398  1604
SWILA          2 0000099E 00000001  I                    930   880B
SWILA1         4 000009A0 00000001  I                    931   933B
SWILA2         2 000009BE 00000001  I                    938   962B
SWILA21        6 000009E8 00000001  I                    949   942B
SWILA3         2 000009F2 00000001  I                    952   939B
SWILA4         6 00000A0E 00000001  I                    960   957B
SWITCH         4 000004AA 00000001  I                    499   333B
SWITCHER       2 00001F8A 00000001  H H                 2799   945
SWRITE         4 00001238 00000001  F F                 1682   536  1644
SYSUT1         4 00000578 FFFFFFFF  F F                 3511  3572
TABOFLO        4 00001678 00000001  I                   2079  1381B 1636B
TABOFLO1       2 0000167C 00000001  I                   2080  2086B
TABOVER        2 00001F86 00000001  H H                 2797  2091
TABSIZE        4 00002164 00000001  F F                 2942   154M  592
TERM1          4 000005CC 00000001  I                    600   127
TERM2          1 00000530 00000001  U                    551   161
TOOLONG        2 00001F8E 00000001  H H                 2802  1731
TOOMANY        1 000000D4           U                   2801  1982
TWRITE         4 00001644 00000001  F F                 2061  1859  2019
TXTLE          2 00001E02 00000001  H H                 2661  2653M
TXTLE1         4 00001E04 00000001  I                   2662  2667B
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Symbol    Length    Value     Id    Type Asm  Program    Defn  References                        X390 3.1.04  2012/08/17 13.13

TXTLE2         2 00001E0E 00000001  I                    2666  2659B
TXTPUT         2 000020E6 00000001  H H                  2911   289   545  2638  2650  2655
TXTSAV         4 00001F1C 00000001  F F                  2762  2648M 2663
TXTT           1 00001EF4 00000001  X X                  2744  2673
TXTTRAF        4 00001DD4 00000001  I                    2648   548B 2519B 2528B 2595B 2617B
UNDEFOP        2 00001F7A 00000001  H H                  2791   839
WHILE          4 0000044E 00000001  I                     466   321B
WHILEM         1 00000084           U                     110   467
WORKAREA       1 00000000 FFFFFFFF  J                    3226   125U
WRITE          4 000015F8 00000001  I                    2028   567B  579B 1374B 1629B
WRITEC         1 00000010           U                     101  2024
WRITEM         1 00000040           U                      99  2014  2075
WRITE1         4 00001616 00000001  I                    2039  2031B
WRITE2         1 00001638 00000001  U                    2054  2030B
XFA            1 00000040           U                    3586   391
XFASTER        1 00000002           U                    3637  1407  1462
XFCOMMA        1 00000025           U                    3649   807
XFDECPT        1 0000003E           U                    3672  2322  2329  2877
XFLSQBR        1 00000008           U                    3641  1711
XFMINUS        1 00000001           U                    3636  1399  1490  1617  1620  2287
XFQUOTE        1 0000002E           U                    3654  2931
XFRBRAC        1 00000026           U                    3650   805
XFZETA         1 0000002F           U                    3671   350   396  1651  1708  1926
ZALLPU         5 00002076 00000001  U                    2879   842  1941
ZALLPUP        5 0000207C 00000001  X X                  2878  2879
ZARMAX         4 00002018 00000001  A A                  2858   668
ZARNO          4 0000201C 00000001  A A                  2859   664   696   727   739   910   976  1061  1649  2088
ZARSPO         4 00002020 00000001  A A                  2860   664   667   672M  696   727   736   738M  910M  976  1061
                                                               1423  1430  1507  1649  1713  2088M
ZARSTACK      35 00002026 00000001  X X                  2862   684  2858  2859  2860
ZBEGERR        4 0000200C 00000001  F F                  2852   837M  863M  943M 1732M 1904M 1939M 1963  1977  2089M 2349M
                                                               2365M 2540M 2627M
ZBRACK         4 00002068 00000001  A A                  2871   675M  702   711M  731   743M 1298  1395  1698  1710M 1725M
ZCLOBRA        1 000020B0 00000001  X X                  2887   681M  700   717M  729   744M 1722M
ZCURITEN       4 00001FFC 00000001  A A                  2845   194M  434   436M  829  1808  1844  1845M
ZCURITLE       2 00002008 00000001  H H                  2848   435   437M 1806  1807M 1815  1843
ZDWP           4 0000211C 00000001  A A                  2920   287M  543  2483  2522M 2527  2535M 2571  2591M 2616  2621M
ZENDERR        4 00002010 00000001  F F                  2853   838M  864M  944M 1732  1905M 1938M 1962  2090M 2348M 2366M
                                                               2541M 2628M
ZERO           2 00001F54 00000001  H H                  2771   131   292   503   680   827   853  1717  2178
ZEROELEM       6 0000205C 00000001  X X                  2869  1421  1451
ZEROFLOA       8 000020F0 00000001  D D                  2914  2168  2216  2229  2382
ZERRONU        2 00002014 00000001  H H                  2854   358M  813M  839M  865M  945M  949M 1731M 1906M 1972  2091M
                                                               2124M 2304M 2367M 2396M 2452M 2458M 2542M 2629M
ZETA           4 0000064E 00000001  I                     646   326B
ZETALET        4 00000836 00000001  I                     798   777B
ZETAM          4 0000171A 00000001  I                    2127  2108B
ZETA0          4 0000179E 00000001  I                    2171  2164B
ZEXCORR        4 00002154 00000001  F F                  2937  2122M 2225M 2239M 2314  2369M
ZEXTABN        8 00002200 00000001  D D                  2964  2411
ZEXTABP        8 00002188 00000001  D D                  2948  2408
ZFILE1         4 00001FD8 00000001  A A                  2833   235M  420   454  1668M
ZFILE2         4 00001FDC 00000001  A A                  2834   233M  366  1666M
ZFILE3         4 00001FE0 00000001  A A                  2835   231M  488  1664M
ZFILE5         4 00001FE4 00000001  A A                  2836   229M  338   784  1662M 2175  2465  2547
ZFILE6         4 00001FE8 00000001  A A                  2837   227M  386  1660M
ZFILE9         4 00001FEC 00000001  A A                  2838   225M  633  1658M
ZFLOFIEL       8 00002108 00000001  X X                  2917  2391M 2392  2439M 2440
ZFOCRI         4 000020D0 00000001  A A                  2902   173M  240  1006  1039  1053  1078  1169  1186  1195  1233
                                                               1275  1330  1422  1563
ZFORTEST       1 000020B1 00000001  X X                  2888   412M  445M  453M  478   885   911   915M  973  1106  1133M
                                                               1143M 1157M 2551
ZFOSTA       255 00000478 FFFFFFFF  U                    3570   246M  247M  937   990   998  1031  1058  1193  1236  1319
                                                               1345  1427  1501  1508  1527  1587
ZFSN           1 000020B3 00000001  C C                  2890   418M  553  1059  1121
ZFSPTR         4 000020CC 00000001  A A                  2901   249M  413   415M  466   472   480   913  1117  1138  1155
                                                               2553
ZIBREAD        4 00001FCC 00000001  A A                  2827   167M 1773  1774M
ZIBRUN         4 00001FC8 00000001  A A                  2826   183M 1754  1774  1775M
ZIBSTAO        4 00001FF4 00000001  A A                  2843   165M  190   830  1123  1179  1242  1270
ZIDEX          1 00002081 00000001  X X                  2880   355M  356   357   768   769   834  1921  2329M 2344  2352M
                                                               2881  2882
ZIGN           2 00002074 00000001  H H                  2876   370M  385M  419M  936
ZINTYP         2 00002132 00000001  X X                  2926  2179  2468
ZITAN          4 00001FF8 00000001  A A                  2844   655   783M
ZITEND         4 00002004 00000001  A A                  2847   198M 1852
ZITREC         4 00002000 00000001  A A                  2846   196M 1805  1847M 1881
ZKBNMAX        2 000020E4 00000001  H H                  2910   291M 2525  2614  2640  2642M
ZKOPEND        4 000020D8 00000001  A A                  2907   284M 2515  2588  2608
ZKOPOOL        4 000020D4 00000001  A A                  2906   163M  281   593  2491  2530  2619  2636
ZLEMAX         4 00001FB4 00000001  A A                  2818   268M 1361
ZLESTA         4 00001FAC 00000001  A A                  2816   265M  571   574  1350  1378
ZLEVA          4 00001FB0 00000001  A A                  2817   266M  570   574  1349  1363M
ZLEVEN         4 00000580 FFFFFFFF  F F                  3577   572M
ZLIRE          2 00002130 00000001  H H                  2925  2472M 2474  2492M 2494
ZLITSTA        4 000020DC 00000001  A A                  2908   288M 2484  2536M 2564  2623M 2637M
ZLVOV          1 000020B2 00000001  X X                  2889   662  1341  2087M
ZOBWORK        4 00001FD0 00000001  A A                  2831   169M  221   615   676  1669  1670M
ZOBWRITE       4 00001FD4 00000001  A A                  2832   171M 1652  1669M 1677  1706  1718  1723
ZONEFLOA       8 000020F8 00000001  D D                  2915  2236
ZOUTCOT        2 00001FF0 00000001  H H                  2839   529   679  1671  1675M 1714
ZPACK          8 000020E8 00000001  D D                  2913  2286M 2289M 2290  2297M 2361M 2362  2374M 2389M 2390  2437M
                                                               2438  2443M 2446M
ZPOINT         1 00002076 00000001  R A                  2877   355  1944
ZPOSIX         2 00002024 00000001  H H                  2861   670   680M  698   707   709M  741M 1616
ZREALTYP       2 00002134 00000001  X X                  2927  2550
ZSTO           4 0000206C 00000001  F F                  2873   857M  858M  859   861  2449M 2450  2557M 2558  2560M 2561
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| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| ZST01 | 2 | 00002070 | 00000001 | X | X | | 2874 | 858 |
| ZST02 | 2 | 00002072 | 00000001 | X | X | | 2875 | 859 |
| ZSUDAD | 4 | 00001F94 | 00000001 | A | A | | 2807 | 256M 559 562 1601 1633 |
| ZSUTAPO | 4 | 00001F90 | 00000001 | A | A | | 2806 | 257M 558 562 1600 1610M 1633M |
| ZSUTEN | 4 | 00000584 | FFFFFFFF | F | F | | 3578 | 560M |
| ZSUTMAX | 4 | 00001F98 | 00000001 | A | A | | 2808 | 259M 1624 |
| ZTEN9 | 8 | 00002100 | 00000001 | D | D | | 2916 | 2441 |
| ZTEXTCO | 4 | 000020E0 | 00000001 | A | A | | 2909 | 290M 546 2517 2610 2639M 2649 2656M |
| ZTO | 4 | 00002150 | 00000001 | F | F | | 2936 | 2238M 2294 2302 |
| ZTOSCA | 4 | 00002158 | 00000001 | F | F | | 2938 | 2293M 2301M 2338 |
| ZWP | 4 | 00002118 | 00000001 | A | A | | 2919 | 286M 2482 2511M 2534M 2570 2597M 2622M |

X390 3.1.04 2012/08/17 13.13

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)                X390 3.1.04  2012/08/17 13.13

    0(0)   145M  146M  147M  148M  149M  150M  151M  152M  153M  154   357M  592M  674M  675   676M  677   769M  831M
          832M  836   867  1640  1695M 1745  1772M 1778  1794  1876M 1900M 1910  1921M 2000  2006  2009  2016  2025M
          2028  2050M 2055M 2068  2076M 2095M 2150M 2187M 2241M 2332M 2648  2663M 2680M 2681  2685  2687  2688
    1(1)   135M  141   158M  163   164M  165   166M  167   168M  169   170M  171   172M  173   174M  175   176M  177M
          178   190M  191   192   193   197M  198   199M  202   205   206   211M  213N  214   240M  241M  242   243
          244M  245   253M  254   255M  256   257   258M  259   263M  264   265   266   267M  268   281M  283   285M
          286   287   288   289M  290   307M  514M  515   523M  525N  526   536M  537   557M  558M  559M  560   569M
          570M  571M  572   586M  588N  589   593M  597M  600M  614M  622   623M  629   772M  773M  775   830M  836
          930M  931M  932   934   937M  959   978M  979   981M  986   989   997   999  1002  1004  1005M 1006M 1016M
          1017M 1018  1020  1030  1032  1035  1037  1038M 1039M 1047  1049  1051  1052M 1053M 1057  1059  1077  1079
          1086  1196M 1197M 1203  1210  1220  1298M 1299M 1300  1302  1304  1306M 1314  1343M 1344  1346  1359  1364M
          1365  1367  1395M 1399  1401M 1402  1405  1407  1420  1449  1456  1458M 1460  1462  1471  1478  1488  1490
          1492M 1494  1540  1542  1544  1554  1575  1577M 1582  1600M 1601  1609M 1610  1612  1613  1614  1615  1616
          1619  1622  1623  1624  1640  1644M 1645  1681M 1689N 1690N 1691N 1695M 1745  1748M 1749  1758M 1766N 1767N
          1768N 1772M 1778  1794  1799M 1800  1859M 1860  1865M 1868  1871  1872M 1877  1885M 1893N 1894N 1895N 1900M
          1910  1931M 1936M 1997M 1999  2002  2016  2019M 2020  2025M 2028  2034M 2035  2039M 2042  2045  2046M 2051
          2060M 2068N 2069N 2070N 2071N 2076M 2099M 2101M 2103  2113  2117  2121  2128  2130M 2141  2142M 2146M 2153M
          2155M 2157  2172M 2183M 2191M 2193M 2195  2222M 2232M 2245M 2247M 2249  2275M 2307M 2338M 2339M 2341M 2366
          2407M 2417M 2418M 2420N 2450  2484M 2485M 2487M 2488  2491M 2492  2502M 2503  2505  2509M 2512  2530M 2531
          2532  2536  2537  2540  2541  2564M 2569M 2576M 2577  2581M 2582M 2583  2592  2602M 2603  2619M 2620  2623
          2624  2648  2663M 2674M 2675  2677  2680  2686  2688M 2701M 2703M 2706M 2707  2710  2716M 2717  2718M 2721M
          2722  2725  2729  2730  2731  2732  2734  2735  2736  2737  2738  2739  2755  2765
    2(2)   306M  307M  308N  615M  622   624M  629   771M  773M  776N  936M  938   952   953   954   961M 1169M 1170
          1172  1173  1175  1177  1181M 1184  1188  1196  1199  1201  1205  1206  1208  1212  1213  1214  1216M 1297M
          1300  1344M 1367  1418  1423M 1430M 1432  1457  1467  1470  1476  1495  1507M 1512  1546M 1551M 1552M 1553M
          1554  1557  1559  1561  1562M 1563M 1576  1579  1583M 1586  1591  1592M 1613  1623  1640  1695M 1745  1772M
          1778  1794  1900M 1910  2016  2025M 2028  2076M 2100M 2101M 2104N 2123M 2154M 2155M 2159N 2192M 2193M 2196N
          2246M 2247M 2250N 2303M 2313B 2350B 2362M 2395M 2408M 2411M 2416  2420  2425  2451M 2457M 2469  2471M 2472
          2488  2505  2512  2537  2561M 2648  2649M 2650M 2652  2663M 2755  2757M
    3(3)   182M  183   305M  307   340   341M  342   350   353   368   370   371M  385   388   390M  391   396   419
          422   424M  457   486   490   492M  508   636   637M  770   773   775M  793M  890   984  1773M 1775  1904
          1905  1922  1923  1926  1928M 1931  1936  1944  1945M 1988  2089  2090  2097  2099  2103M 2130  2131  2136
          2153  2157M 2158  2172  2190  2191  2195M 2203  2221  2222  2244  2245  2249M 2269  2275  2276  2627  2628
          2648  2663M 2673M 2675  2677  2729  2736  2737
    4(4)   221M  224   236M  338   340   344M  366   368   369M  386   388   389M  420   422   423M  454   457   458M
          488   490   491M  508   531M  633   635   636   638M  674   704   710   733   742   784   786   787M  805
          807  1297  1396  1651  1652M 1653  1654M 1699  1709M 2175  2178  2179  2180M 2465  2468  2473  2474  2475M
          2493  2494  2495M 2547  2550  2648  2663M 2671M 2693B
    5(5)   127M  128   129M  130   161M  162   193M  194   195M  196   207M  213   222M  223M  224M  225   226M  227
          228M  229   230M  231   232M  233   234M  235   248M  249   274M  275   276M  277   282M  283M  284   413M
          414M  415   417M  418   466M  467   472M  473   480M  481   519M  525   544M  545M  546   552M  553M  554
          564M  565M  576M  577M  581M  582M  588   616M  617M  618   626   687M  688M  689   750M  751M  752   833M
          835B  874M  875M  876M  877N  913M  914   952M  953M  954M  955M  955N  956   958   960   988M  989M  990M
          990N  991   996M  997M  998M  998N 1001  1009  1029M 1030M 1031M 1031N 1034  1042  1056M 1057M 1058M 1058N
          1063  1066  1079M 1080M 1081  1083M 1084M 1085  1117M 1118  1122M 1123M 1124  1138M 1139  1155M 1156  1178M
          1179M 1180  1185M 1186M 1187  1188  1191M 1192M 1193M 1193N 1194  1202M 1203M 1204  1209M 1210M 1211  1233M
          1235  1238  1240  1244  1246M 1269M 1270M 1271  1275M 1277M 1278  1319M 1321  1345M 1347  1352M 1355M 1356M
          1357  1371M 1372M 1375M 1376M 1377  1396M 1397M 1398  1424M 1425M 1426  1427N 1431N 1499M 1500M 1501N 1505M
          1506M 1508N 1511N 1525M 1526M 1527N 1585M 1586M 1587N 1591M 1593  1603M 1606M 1607M 1608  1626M 1627M 1630M
          1631M 1632  1655M 1656M 1657M 1658  1659M 1660  1661M 1662  1663M 1664  1665M 1666  1667M 1668  1671M 1672
          1674M 1675  1676M 1689  1698M 1700  1707  1708  1713M 1716  1717  1723M 1724M 1725  1753M 1766  1817M 1818
          1819M 1821M 1833  1835  1836  1837  1838  1839  1840  1843M 1844M 1845  1846M 1847  1851M 1852  1880M 1893
          1959M 1960  1968M 1969  1970M 1971  1972  1973  1978  1981  1982  1983  1984M 1985  1988M 1989M 1993M 1994
          1998M 1999M 2000  2003  2006M 2007M 2008  2015B 2026B 2069  2079M 2081  2084M 2085  2290M 2291  2314M 2315M
          2317  2319M 2320  2321M 2322  2324  2344M 2345  2347  2390M 2391  2438M 2439  2448M 2449  2553M 2554  2648
          2651M 2652M 2653  2654M 2655M 2656  2663M 2666  2767M 2768
    6(6)   416M  417   434M  435M  436   437   566M  578M  618M  619M  620M  625M 1078M 1080  1084  1234M 1235M 1236M
          1236N 1237  1241M 1242M 1243  1349M 1350  1358M 1359  1360  1361  1363  1373M 1378M 1427M 1428  1431M 1432
          1436  1501M 1502  1508M 1509  1511M 1512  1516  1520  1527M 1528  1587M 1588  1628M 1653M 1657  1670  1677M
          1690  1699M 1700M 1702  1704  1705  1706M 1707  1709  1710  1711  1714M 1715M 1716  1718M 1754M 1767  1815M
          1816  1817  1822M 1823M 1824N 1881M 1894  1962M 1963M 1964  1966M 1967M 1968  1970  1971  1974M 1976  1977M
          1978  2056M 2070  2080M 2081M 2082M 2082N 2083  2376M 2377M 2383  2393  2567M 2568  2569  2574  2581  2582
          2587  2590  2601  2602  2607  2648  2657M 2662  2663M 2666M 2738  2756M
    7(7)   655M  656   658   673   702M  703M  704   707M  708M  709   710M  711   731M  732M  733   736M  737M  738
          739   741   742M  743   783   786   829M  834   836M  842M  847   849   855   857   867M  874   892   930
          979  1103  1115  1120  1122  1126  1136  1360  1457M 1467  1475  1476M 1481  1495M 1497M 1500  1503  1805M
          1806  1807  1810  1818M 1820M 1833  1835  1836  1837  1838  1839  1840  1914  1941M 1991M 1993N 2096M 2113M
          2117M 2121M 2122  2128M 2136M 2137M 2141M 2151M 2188M 2207M 2225  2235M 2239  2291M 2354  2359M 2360  2369
          2384M 2405  2409M 2435M 2483M 2499  2503  2510  2521M 2522  2532M 2533M 2535  2571M 2572  2574M 2582  2587M
          2588  2590M 2591  2596  2601M 2602  2607M 2608  2610  2620M 2621  2622
    8(8)   356M  667M  668   670   671M  672   673   678   679   684M  768M  827   838   864   944  1015M 1016  1020
          1024  1076  1082  1083  1105M 1111  1113M 1114  1120  1121  1125  1127  1131  1140  1142M 1144  1147  1170
          1214  1220M 1249M 1250  1260M 1261  1262  1264  1266  1268  1272M 1276  1281  1418M 1422M 1425  1439  1441M
          1443  1470M 1475M 1481M 1503  1506  1526  1576M 1579  1592  1593M 1612  1808M 1809M 1810  1819  1848  1850
          1901  1911M 1914  1938  1994  1998  2003M 2007  2009M 2012  2094M 2134  2142  2149M 2186M 2205  2214  2227
          2237M 2238  2240M 2284M 2285  2293  2294M 2300M 2301  2302M 2323M 2324  2326M 2333  2336M 2337M 2345  2347M
          2348  2370M 2376  2481M 2485  2486  2487  2498  2568M 2576  2596M 2597
    9(9)   543M  544   706M  735M  770M  894M  935M  938  1149M 1195M 1197  1213  1217M 1342B 1366B 1383B 1403B 1414B
          1440B 1482B 1523B 1529B 1922M 1989  1997  2012  2097M 2131M 2137  2143M 2158M 2190M 2203  2221M 2244M 2276M
          2340M 2341  2357  2365  2374  2383M 2384  2385  2387M 2388  2405M 2407  2412  2414M 2416N 2428M 2431M 2432
          2434M 2436  2442M 2442N 2443  2482M 2486M 2487  2498M 2499  2509  2510M 2511  2515  2517  2520M 2527M 2531M
          2534  2570M 2572  2576  2616M 2651  2654
   10(A)   118U  119M
   11(B)   118U  120M  121M  122
   12(C)   118U  122M  123M
   13(D)   125U
   14(E)   203M  515M  516   517M  537M  538   539M  548M  897M 1014M 1128B 1134B 1158B 1311M 1312M 1313M 1314  1317
          1320  1326  1328  1329M 1330M 1438M 1464M 1487M 1522M 1584B 1589B 1625B 1634B 1640  1645M 1646  1647M 1693M
          1695M 1745  1749M 1750  1751M 1770M 1772M 1778  1794  1800M 1801  1802M 1860M 1861  1862M 1869M 1878M 1897M
          1900M 1910  2016  2020M 2021  2022M 2025M 2028  2035M 2036  2037M 2043M 2052M 2073M 2076M 2455B 2480M 2489B
          2519M 2528M 2529M 2575M 2578B 2580M 2584B 2595M 2600M 2604B 2617M 2618M 2644B 2648  2660M 2663M 2664B 2671
          2672M 2682  2684  2689M 2692M 2697  2708M 2711M 2715M 2717  2723M
   15(F)   114B  119   120   186M  202M  203B  217M  298M  302M  347M  352M  365M  374M  377M  398M  401M  404M  407M
          427M  440M  448M  461M  496M  516M  517B  532M  538M  539B  567M  579M  607M  641M  646M  666M  718M  747M
          764M  790M  798M  799M  812M  826M  840M  866M  918M  946M 1023M 1087B 1130M 1152M 1221B 1251B 1282B 1296B
          1301B 1374M 1381M 1382M 1404M 1413M 1459M 1493M 1547B 1558B 1578M 1629M 1636M 1637M 1640  1646M 1647B 1691M
          1692M 1693B 1695M 1696B 1721M 1733M 1745  1750M 1751B 1768M 1769M 1770B 1772M 1776B 1778  1794  1801M 1802B
```

```
1861M 1862B 1868M 1869B 1877M 1878N 1895M 1896M 1897B 1900M 1902B 1907M 1910  1932M 1933M 1937M 1940M 1979B
1992B 2004B 2010B 2016  2021M 2022B 2025M 2028  2036M 2037B 2042M 2043B 2051M 2052N 2071M 2072M 2073B 2076M
2077B 2092B 2112M 2116M 2120M 2127M 2129M 2140M 2171M 2177M 2210M 2213M 2219M 2220M 2226M 2273M 2274M 2283M
2299M 2342M 2368M 2371M 2397M 2453M 2459M 2467M 2543M 2549M 2630M 2636M 2637  2638M 2639  2640M 2641M 2642
2643  2648  2663M 2679M 2681M 2682  2684M 2685M 2686  2687M 2689  2707M 2708B 2722M 2723B 2753M 2754  2756N
2757N 2768M 2769B
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| WORKAREA | 00000CB6 | FFFFFFFF | 3226 | | PRIMARY INPUT |

```
Con Source       Members                                                                    X390 3.1.04  2012/08/17 13.13

  1 SYS1.MACLIB
               CHECK    CLOSE    DCB      FREEMAIN GETMAIN  IEZREGS  IHBINNRA IHBINNRB IHBRDWRS IHB01    NOTE
               POINT    PUT      READ     SPIE     WRITE    XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
  4 SYSD.ALGOLF.MACLIB
               IEXCGEN  IEXCHAR  IEXENTRY WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text |
|---|---|---|---|---|---|---|---|---|---|---|
| 118 | | USING | Ordinary | 00000001 | 00000000 | 00003000 | 10 | 00FE0 | 2496 | IEX30000,R10,R11,R12 |
| 118 | | USING | Ordinary | 00000001 | 00001000 | | 11 | 00FFC | 2766 | |
| 118 | | USING | Ordinary | 00000001 | 00002000 | | 12 | 005AC | 2767 | |
| 125 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 13 | 006CD | 2734 | WORKAREA,R13 |

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X30    STEPNAME: IEX30    PROCSTEP: X390

Primary input:  lines      1 to    3071 of SYSD.ALGOLF.ASM(IEX30)

SYSLIB library records read: 4614

SYSUT1 work file size: 372833 bytes

SYSUT2 work file size: 382874 bytes

SYSUT3 work file size: 245680 bytes

SYSLIN file records written: 208

TXA000I Return code 0, elapsed time 8.08 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX30000 | 0025EB | 5 |

# IEX31

LEVEL

V2.M01

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcessS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX31)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131313.RA000.T1X31.OBJECT
SYSPRINT    JES2.JOB09275.SO0102
SYSUT1      SYS12230.T131313.RA000.T1X31.SYSUT1
SYSUT2      SYS12230.T131313.RA000.T1X31.SYSUT2
SYSUT3      SYS12230.T131313.RA000.T1X31.SYSUT3
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                      2 *                                                                        00002001
                                      3 *        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                     00003001
                                      4 *                                                                        00004001
                                      5 *        FUNCTION/OPERATION -                                            00005001
                                      6 *        THE ERROR PATTERNS GENERATED DURING SCANIII ARE HANDLED         00006001
                                      7 *        AND THE CORRESPONDING DIAGNOSTIC MESSAGES ARE                   00007001
                                      8 *        GENERATED                                                       00008001
                                      9 *                                                                        00009001
                                     10 *        ENTRY POINT - IEX31000 - ERROR MESSAGE EDITING                  00010001
                                     11 *                      XCTL EP=IEX31                                     00011001
                                     12 *                      THE MODULE IS ENTERED FROM IEX30                  00012001
                                     13 *                                                                        00013001
                                     14 *        INPUT - N/A                                                     00014001
                                     15 *                                                                        00015001
                                     16 *        OUTPUT -                                                        00016001
                                     17 *        THE DIAGNOSTIC MESSAGES ARE PUT OUT ON SYSPRINT. IF             00017001
                                     18 *        SYSPRINT IS DOWN, THIS IS REPORTED WITH A WTO                   00018001
                                     19 *                                                                        00019001
                                     20 *        EXTERNAL ROUTINE - THE PRINT ROUTINE IN IEX00 IS USED           00020001
                                     21 *                                                                        00021001
                                     22 *        EXIT - NORMAL -                                                 00022001
                                     23 *        IF NO TERMINATING ERROR HAS OCCURRED CONTROL IS GIVEN           00023001
                                     24 *        TO THE NEXT PHASE BY MEANS OF XCTL EP=IEX40.                    00024001
                                     25 *                                                                        00025001
                                     26 *        EXIT - ERROR -                                                  00026001
                                     27 *        IF A TERMINATING ERROR HAS OCCURRED (IN THIS MODULE OR          00027001
                                     28 *        THE PRECEDING) CONTROL IS GIVEN TO THE TERMINATING              00028001
                                     29 *        MODULE BY MEANS OF XCTL EP=51002.                               00029001
                                     30 *                                                                        00030001
                                     31 *        TABLES/WORKAREAS -                                              00031001
                                     32 *        THE MESSAGE TEXTS WITH CORRESPONDING ADDRESS TABLE ARE          00032001
                                     33 *        IN THE LOAD MODULE IEX31M                                       00033001
                                     34 *        THE ERROR MESSAGE EDITING ROUTINE, CSECT IEX60000, ALSO         00034001
                                     35 *        USES THE FOLLOWING TABLES -                                     00035001
                                     36 *        WINTEBC  - TRANSLATION OF INTERNAL CHARACTERS TO EBCDIC         00036001
                                     37 *        WSYMBSRC - TRANSLATION OF INTERNAL SYMBOLS TO EBCDIC            00037001
                                     38 *        WSYMBSTK - TRANSLATION OF INTERNAL SYMBOLS TO EBCDIC            00038001
                                     39 *        WORDSEBC - TRANSLATION OF COMPOUND SYMBOLS IF SOURCE            00039001
                                     40 *                   IN EBCDIC                                            00040001
                                     41 *        WORDSISO - TRANSLATION OF COMPOUND SYMBOLS IF SOURCE            00041001
                                     42 *                   IN ISOCODE                                           00042001
                                     43 *        WEBCDIC  - TRANSLATION EBCDIC - EBCDIC                          00043001
                                     44 *        A WORKAREA OF 270 BYTES, WAREA, IS USED FOR BUILDING            00044001
                                     45 *        THE MESSAGES                                                    00045001
                                     46 *                                                                        00046001
                                     47 *        ATTRIBUTES - NONE                                               00047001
                                     48 *                                                                        00048001
                                     49 *        NOTES -                                                         00049001
                                     50 *        CHARACTER CODE DEPENDENCE. FOR THE BUILDING OF A                00050001
                                     51 *        MESSAGE (CODE PART BETWEEN COT03 AND COT12) THE                 00051001
                                     52 *        FOLLOWING APPLIES. IN CASE NO SOURCE INFORMATION IS TO          00052001
                                     53 *        BE INSERTED (COT31), OR IF THE INFORMATION IS EBCDIC-           00053001
                                     54 *        CHARACTERS (COT07), THE OPERATION OF CSECT IEX60000             00054001
                                     55 *        DEPENDS UPON AN INTERNAL REPRESENTATION OF THE EXTERNAL         00055001
                                     56 *        CHARACTER SET WHICH IS EQUIVALENT TO THE ONE USED AT            00056001
                                     57 *        ASSEMBLY TIME.                                                  00057001
                                     58 *                                                                        00058001
                                     59 *        IF THE SOURCE INFORMATION TO BE INSERTED IS INTERNAL            00059001
                                     60 *        CHARACTERS (COT33) THE OPERATION OF CSECT IEX60000              00060001
                                     61 *        DEPENDS UPON A TRANSLATION FROM THE INTERNAL                    00061001
                                     62 *        REPRESENTATION TO THE EBCDIC CHARACTER SET BY MEANS OF          00062001
                                     63 *        THE TABLE 'WINTEBC'.                                            00063001
                                     64 *                                                                        00064001
                                     65 *        IF THE SOURCE INFORMATION TO BE INSERTED IS INTERNAL            00065001
                                     66 *        ALGOL SYMBOLS (COT10) THE OPERATION OF CSECT IEX60000           00066001
                                     67 *        DEPENDS UPON A TRANSLATION FROM THE INTERNAL                    00067001
                                     68 *        REPRESENTATION TO THE EBCDIC CHARACTER SET BY MEANS OF          00068001
                                     69 *        THE TABLES 'WSYMBSTK'/'WSYMBSRC' AND 'WORDSISO'/'WORDSEBC'.     00069001
                                     70 *                                                                        00070001
                                     71 *        FOR THE OUTPUT OF A MESSAGE (CODE PART BETWEEN COT12            00071001
                                     72 *        AND COT21) THE FOLLOWING APPLIES.                               00072001
                                     73 *        WHEN A MESSAGE HAS BEEN BUILT IN EBCDIC, AN EBCDIC -            00073001
                                     74 *        EBCDIC TRANSLATION IS PERFORMED BEFORE OUTPUT BY MEANS          00074001
                                     75 *        OF THE TABLE 'WEBCDIC'. THUS THE OUTPUT MAY BE MODIFIED         00075001
                                     76 *        BY MAKING CHANGES IN THIS TABLE.                                00076001
                                     77 *                                                                        00077001
                                     78 *        THE OPERATION OF CSECT IEX31000 DOES NOT DEPEND UPON A          00078001
                                     79 *        PARTICULAR INTERNAL REPRESENTATION OF THE EXTERNAL              00079001
                                     80 *        CHARACTER SET.                                                  00080001
                                     81 *                                                                        00081001
                                     82 *        AT SYSTEM GENERATION THIS MODULE WILL BE LINKED                 00082001
                                     83 *        TOGETHER WITH THE MODULE IEX31M TO FORM THE MODULE              00083001
                                     84 *        IEX31.                                                          00084001
                                     85 *                                                                        00085001
                                     86 *        THIS MODULE IS ONLY INTENDED TO BE EXECUTED IN                  00086001
                                     87 *        CONNECTION WITH THE OTHER MODULES OF THE ALGOL COMPILER,        00087001
                                     88 *        IN PARTICULAR IT REQUIRES THE COMMON WORKAREA                   00088001
                                     89 *                                                                        00089001
000000                00000 0005C    90 IEX31000 CSECT                                                           00090001
                                     91 *                                                                        00091001
                                     92          IEXENTRY 'IEX31000 LEVEL 2.1 &SYSDATE &SYSTIME'                 00092001
                                     93+*                                                                        01-IEXEN
000000 47F0 F026            00026    94+         B     38(,R15)              BRANCH AROUND ID                    01-IEXEN
000004 21                            95+         DC    AL1(33)               LENGTH OF IDENTIFIER                01-IEXEN
000005 C9C5E7F3F1F0F0F0              96+         DC    CL33'IEX31000 LEVEL 2.1 08/17/12 13.13'                  +01-IEXEN
                                      +                                         IDENTIFIER                       01-IEXEN
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     97 *                                                                        00093001
                 R:F  00000          98          USING IEX31000,R15                                             00094001
                                     99 *                                                                        00095001
000026 5820 F058            00058   100          L     R2,=A(IEX60000)          ADDRESS ERROR MSG EDIT ROUTINE   00096001
00002A 41E0 F034            00034   101          LA    R14,SUSCR                LOAD RETURN ADDRESS              00097001
00002E 4110 F04C            0004C   102          LA    R1,ERRINFO               ADDRESS INFO FOR ERROR ED ROUT   00098001
000032 07F2                         103          BR    R2                       GOTO ERROR MESSAGE EDITING       00099001
                                    104 *                                                                        00100001
000034                              105          DC    0F'0'                                                     00101001
                                    106 *                                                                        00102001
                                    107 *        INITIALIZATION OF SUBSCR HANDLING                               00103001
                                    108 *                                                                        00104001
                                    109 SUSCR    XCTL  EP=IEX40000                                               00105001
000034                              110+SUSCR    DS    0H                                                        01-XCTL
000034                              111+         CNOP  0,4                                                       02-IHBIN
000034 45F0 F048            00048   112+         BAL   15,*+20               BRANCH AROUND CONSTANTS             02-IHBIN
000038 00000040                     113+         DC    A(*+8)                ADDR. OF PARM. LIST                 02-IHBIN
00003C 00000000                     114+         DC    A(0)                   DCB ADDRESS PARAMETER              02-IHBIN
000040 C9C5E7F4F0F0F0F0             115+         DC    CL8'IEX40000'          EP PARAMETER                       02-IHBIN
000048 0A07                         116+         SVC   7                                    ISSUE XCTL SVC       01-XCTL
                                    117 *                                                                        00106001
00004A 0000
00004C 00000000                     118 ERRINFO  DC    V(IEX31M00)              ADDR OF MESSAGE TEXTS            00107001
000050 00000000                     119          DC    V(IEX31M01)              ADDR OF ADDR TABLE               00108001
000054 0077                         120          DC    H'119'                   MODIFICATION NUMBER              00109001
                                    121 *                                                                        00110001
000058                              122          LTORG                                                           00111001
000058 00000060                     123                =A(IEX60000)
                                    124 *                                                                        00112001
                                    125          COPY  IEX60000                                                  00113001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

                                    127=*                                                              00002001
                                    128=*        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER           00003001
                                    129=*                                                              00004001
000060                00060 00824   130=IEX60000 CSECT                                                 00005001
                                    131=*                                                              00006001
                 R:2  00060         132=         USING IEX60000,R2                                     00007001
                                    133=*                                                              00008001
                                    134=*        REGISTER DEFINITIONS                                  00009001
                                    135=*                                                              00010001
                                    136=*        R1                          POINTS TO PARAMETER LIST  00011001
                                    137=*        R1                          RETURNS ADDR OF PRINT BUFFER 00012001
                                    138=*        R2                          BASE REGISTER FOR COTEMER 00013001
                                    139=*        R4                          BASE REGISTER FOR MESSAGE POOL 00014001
                                    140=*        R5                          POINTER TO ENTRY IN ERROR POOL 00015001
                                    141=*        R6                          POINTER TO INSERTION CODE 00016001
                                    142=*        R7                          POINTER TO ENTRY IN MSG POOL 00017001
                                    143=*        R14                         PTR TO MESSAGE TEXT WORKAREA 00018001
                                    144=*                                                              00019001
                                    145=*        INITIALIZATION                                        00020001
                                    146=*                                                              00021001
                 R:D  00000         147=         USING WORKAREA,R13          BASEREG FOR WORKAREA DSECT 00022001
000060 D209 2518 1000 00578 00000   148=         MVC   AWEMPOOL(10),0(R1)    GET ADDRS AND MOD NUMBER  00023001
000066 4190 233E            0039E   149=COT00    LA    R9,WDIRET1            STORE RETURN ADDR         00024001
00006A 5090 D090            00090   150=         ST    R9,ERET               IN WORKAREA               00025001
00006E 90EF 252C            0058C   151=         STM   R14,R15,SVAR1         SAVE RETURN ADDR AND BASE 00026001
000072 9190 D082      00082         152=         TM    COMPFLGS+2,PRT+PRTNO  SYSPRINT DOWN/NOT OPENED ? 00027001
000076 4770 2346            003A6   153=         BNZ   COT18                 YES, GIVE CONSOLE MESSAGE 00028001
00007A 5850 D0BC            000BC   154=         L     R5,ERRPOOL            ADDR ERROR POOL           00029001
00007E 5550 D0C0            000C0   155=         CL    R5,NEXTERR            ERROR POOL EMPTY ?        00030001
000082 4780 231C            0037C   156=         BE    COT28                 YES                       00031001
000086 D50A D133 24DE 00133 0053E   157=         CLC   PAGEHEAD+39(L'HEADD1),HEADD1  HEADINGS ALREADY SET ? 00032001
00008C 4780 2056            000B6   158=         BE    COT01                 YES, BYPASS HEADINGS      00033001
000090 92FF D099      00099         159=         MVI   LINCNT+1,255          FORCE HEADINGS TO BE PRINTED 00034001
000094 9240 D10D      0010D         160=         MVI   PAGEHD1C+1,C' '       BLANK FIRST HEADING LINE  00035001
000098 D26C D10E D10D 0010E 0010D   161=         MVC   PAGEHD1C+2(109),PAGEHD1C+1                      00036001
00009E D263 D190 D117 00190 00117   162=         MVC   PAGEHD2D(L'PAGEHD2D),PAGEHD1D  BLANK 2ND HEADING LINE 00037001
0000A4 D263 D209 D117 00209 00117   163=         MVC   PAGEHD3D(L'PAGEHD3D),PAGEHD1D  BLANK 3RD HEADING LINE 00038001
0000AA D20A D13E 24DE 0013E 0053E   164=         MVC   PAGEHD1D+39(L'HEADD1),HEADD1   MOVE IN HEADD1  00039001
0000B0 D21A D190 24E9 00190 00549   165=         MVC   PAGEHD2D(L'HEADD2),HEADD2      MOVE IN HEADD2  00040001
                                    166=*                                                              00041001
                                    167=*        HANDLING OF THE ENTRIES IN ERROR POOL                 00042001
                                    168=*                                                              00043001
0000B6 5840 2518            00578   169=COT01    L     R4,AWEMPOOL           ADDR ERROR MESSAGE POOL   00044001
0000BA 1B77                         170=         SR    R7,R7                                           00045001
0000BC 4370 5001            00001   171=         IC    R7,1(,R5)             GET ERROR MSG NUMBER      00046001
0000C0 41A0 00C8            000C8   172=         LA    R10,200                                         00047001
0000C4 197A                         173=         CR    R7,R10                DIRECTORY MESSAGE ?       00048001
0000C6 4740 2070            000D0   174=         BL    COT36                 NO                        00049001
0000CA 48A0 2520            00580   175=         LH    R10,MODNUMB           YES, MODIFY NUMBER        00050001
0000CE 1B7A                         176=         SR    R7,R10                                          00051001
0000D0 8970 0002            00002   177=COT36    SLL   R7,2                  GET IT FOUR TIMES         00052001
0000D4 5890 251C            0057C   178=         L     R9,AWADDTAB           ADDR ADDR TABLE           00053001
0000D8 1A79                         179=         AR    R7,R9                 GET CORRECT ENTRY         00054001
0000DA 5870 7000            00000   180=         L     R7,0(,R7)             LOAD ADDR TO ENTRY IN ERMSG POOL 00055001
                                    181=*                                                              00056001
                                    182=*        GET LENGTH OF INSERT CODE PART                        00057001
                                    183=*                                                              00058001
0000DE 4160 7002            00002   184=COT02    LA    R6,2(,R7)             POINT TO FIRST INSERTION CODE 00059001
0000E2 1B99                         185=         SR    R9,R9                                           00060001
0000E4 4390 7001            00001   186=         IC    R9,1(,R7)             GET NUMBER OF INSERTION CODES 00061001
0000E8 18A9                         187=         LR    R10,R9                                          00062001
0000EA 18C9                         188=         LR    R12,R9                                          00063001
0000EC 41C0 C001            00001   189=         LA    R12,1(,R12)           SET INSERTION CODE COUNTER 00064001
0000F0 8990 0001            00001   190=         SLL   R9,1                  DOUBLE IT                 00065001
0000F4 1A9A                         191=         AR    R9,R10                GET IT 3 TIMES            00066001
                                    192=*                                                              00067001
                                    193=*        HANDLE SEVERITY CODE                                  00068001
                                    194=*                                                              00069001
0000F6 41A9 7002            00002   195=COT03    LA    R10,2(R9,R7)          GET ADDR TO BYTE BEFORE TEXT 00070001
0000FA D200 23D9 A000 00439 00000   196=         MVC   WAREA+9(1),0(R10)     INSERT SEVERITY CODE      00071001
000100 95E6 A000      00000         197=         CLI   0(R10),C'W'                                     00072001
000104 4770 20B0            00110   198=         BNE   COT03A                                          00073001
000108 9620 D080      00080         199=         OI    COMPFLGS,WERR         SET WARNING MESSAGE       00074001
00010C 47F0 20C8            00128   200=         B     COT04                                           00075001
                                    201=*                                                              00076001
000110 95E2 A000      00000         202=COT03A   CLI   0(R10),C'S'                                     00077001
000114 4770 20C4            00124   203=         BNE   COT03B                                          00078001
000118 9610 D080      00080         204=         OI    COMPFLGS,SERR         SET SEVERE ERROR          00079001
00011C 9680 D080      00080         205=         OI    COMPFLGS,COMPMODE     SET SYNTAX CHECK MODE     00080001
000120 47F0 20C8            00128   206=         B     COT04                                           00081001
                                    207=*                                                              00082001
000124 9608 D080      00080         208=COT03B   OI    COMPFLGS,TERR         SET BIT FOR TERMINATING ERROR 00083001
                                    209=*                                                              00084001
                                    210=*        INSERTION OF MSG NUMBER AND SEMICOLON COUNTER         00085001
                                    211=*                                                              00086001
000128 1BAA                         212=COT04    SR    R10,R10               CLEAR REG                 00087001
00012A 43A5 0001            00001   213=         IC    R10,1(R5)             GET ERROR MSG NUMBER      00088001
00012E 4EA0 23C8            00428   214=         CVD   R10,WDEC+8                                      00089001
000132 F327 23D3 23C8 00433 00428   215=         UNPK  WAREA+3(3),WDEC+8(8)  CONVERT TO PRINTABLE DECIMAL 00090001
000138 96F0 23D5      00435         216=         OI    WAREA+5,X'F0'         MAKE CHAR PRINTABLE       00091001
00013C 9180 5000      00000         217=         TM    0(R5),X'80'           BLANKS FOR SC ?           00092001
000140 4780 20F2            00152   218=         BZ    COT26                 NO                        00093001
000144 D204 23DC 2534 0043C 00594   219=         MVC   WAREA+12(5),BLANKS    YES, MOVE BLANKS          00094001
00014A 947F 5000      00000         220=         NI    0(R5),X'7F'           REMOVE TAG                00095001
00014E 47F0 2104            00164   221=         B     COT31                                           00096001
                                    222=*                                                              00097001
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  Active USINGs: WORKAREA,R13  IEX60000,R2  IEX31000,R15

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

000152 48A0 5002            00002   223=COT26    LH    R10,2(,R5)           GET SEMICOLON COUNTER             00098001
000156 4EA0 23C8            00428   224=         CVD   R10,WDEC+8                                             00099001
00015A F347 23DC 23C8 0043C 00428   225=         UNPK  WAREA+12(5),WDEC+8(8)  CONVERT TO READABLE DECIMAL     00100001
000160 96F0 23E0      00440         226=         OI    WAREA+16,X'F0'       MAKE CHAR PRINTABLE               00101001
                                    227=*                                                                     00102001
                                    228=*        INSERTION OF FIXED MESSAGE                                   00103001
                                    229=*                                                                     00104001
000164 41E0 23E4            00444   230=COT31    LA    R14,WAREA+20         POINT TO FIRST TEXTBYTE IN WAREA  00105001
000168 9500 7001      00001         231=         CLI   1(R7),0              ANY INSERTION CODE ?              00106001
00016C 4770 2126            00186   232=         BNE   COT05                YES                               00107001
000170 41A0 7003            00003   233=         LA    R10,3(,R7)           GET ADDR OF MSG TXT               00108001
000174 1BBB                         234=         SR    R11,R11                                                00109001
000176 43B0 7000            00000   235=         IC    R11,0(,R7)           GET L'ENTRY                       00110001
00017A 1AB7                         236=         AR    R11,R7               GET NEXT ENTRY                    00111001
00017C 1BBA                         237=         SR    R11,R10              GET L'MSG TXT                     00112001
00017E 44B0 23AC            0040C   238=         EX    R11,WMOVE1           MOVE MSG TXT TO WORKAREA          00113001
000182 41EB E001            00001   239=         LA    R14,1(R11,R14)       UPDATE WAREA POINTER              00114001
000186 46C0 212E            0018E   240=COT05    BCT   R12,COT06            GOTO INS CODE TREATMENT IF ANY    00115001
00018A 47F0 222E            0028E   241=         B     COT12                ALL INS CODES TREATED             00116001
                                    242=*                                                                     00117001
                                    243=*        INSERTION CODE TREATMENT                                     00118001
                                    244=*                                                                     00119001
                                    245=*        TEST ACTION PART OF INSERT CODE                              00120001
                                    246=*                                                                     00121001
00018E 4190 000F            0000F   247=COT06    LA    R9,15                LOAD REG TO ZERO HIGHORDER BITS   00122001
000192 1BAA                         248=         SR    R10,R10                                                00123001
000194 1BBB                         249=         SR    R11,R11                                                00124001
000196 91F0 6000      00000         250=         TM    0(R6),X'F0'                                            00125001
00019A 4710 215A            001BA   251=         BO    COT37                GOTO 'INSERT BLANKS'              00126001
00019E 4780 2174            001D4   252=         BZ    COT30                GOTO 'INSERT MESSAGE TEXT'        00127001
0001A2 9180 6000      00000         253=         TM    0(R6),X'80'                                            00128001
0001A6 4710 2190            001F0   254=         BO    COT07                GOTO 'UNALTERED TEXT'             00129001
0001AA 9140 6000      00000         255=         TM    0(R6),X'40'                                            00130001
0001AE 4710 21A6            00206   256=         BO    COT10                GOTO 'ALGOL SYMBOL'               00131001
0001B2 9120 6000      00000         257=         TM    0(R6),X'20'                                            00132001
0001B6 4710 220E            0026E   258=         BO    COT33                GOTO 'INTERNAL CHARACTERS'        00133001
                                    259=*                                                                     00134001
                                    260=*        INSERTION OF BLANKS AT END OF PRTLIN                         00135001
                                    261=*                                                                     00136001
0001BA 4130 242A            0048A   262=COT37    LA    R3,WAREA+90          CALC FREE SPACE ON 1ST PRT LINE   00137001
0001BE 1B3E                         263=         SR    R3,R14                                                 00138001
0001C0 47D0 2188            001E8   264=         BNP   COT09                BYPASS BLANKING IF LINE FULL      00139001
0001C4 9240 E000      00000         265=COT38    MVI   0(R14),C' '          INSERT BLANK                      00140001
0001C8 41E0 E001            00001   266=         LA    R14,1(,R14)          STEP WAREA POINTER                00141001
0001CC 4630 2164            001C4   267=         BCT   R3,COT38             BRANCH IF 1ST PRT LINE NOT FULL   00142001
0001D0 47F0 2188            001E8   268=         B     COT09                GOTO NEXT INS CODE                00143001
                                    269=*                                                                     00144001
                                    270=*        INSERTION OF MESSAGE TEXT PART                               00145001
                                    271=*                                                                     00146001
0001D4 43A0 6002            00002   272=COT30    IC    R10,2(,R6)                                             00147001
0001D8 41AA 7000            00000   273=         LA    R10,0(R10,R7)        GET ADDR OF TEXT PART             00148001
0001DC 43B0 6001            00001   274=         IC    R11,1(,R6)           GET L'TEXT PART                   00149001
0001E0 44B0 23AC            0040C   275=COT08    EX    R11,WMOVE1           MOVE TO WORKAREA                  00150001
0001E4 41EB E001            00001   276=COT35    LA    R14,1(R11,R14)       UPDATE WORKAREA POINTER           00151001
0001E8 4160 6003            00003   277=COT09    LA    R6,3(,R6)            UPDATE INS CODE POINTER           00152001
0001EC 47F0 2126            00186   278=         B     COT05                GOTO NEXT INS CODE                00153001
                                    279=*                                                                     00154001
                                    280=*        UNALTERED TEXT                                               00155001
                                    281=*                                                                     00156001
0001F0 43B0 5000            00000   282=COT07    IC    R11,0(,R5)           GET LENGTH OF SOURCE TEXT         00157001
0001F4 41A0 0005            00005   283=         LA    R10,5                                                  00158001
0001F8 1BBA                         284=         SR    R11,R10                                                00159001
0001FA 4740 2188            001E8   285=         BM    COT09                NO MOVE IF NO SOURCE TEXT         00160001
0001FE 41A0 5004            00004   286=         LA    R10,4(,R5)           GET ADDR OF SOURCE TEXT           00161001
000202 47F0 2180            001E0   287=         B     COT08                MOVE TEXT, GOTO NEXT INS CODE     00162001
                                    288=*                                                                     00163001
                                    289=*        ALGOL SYMBOL                                                 00164001
                                    290=*                                                                     00165001
000206 9102 D082      00082         291=COT10    TM    COMPFLGS+2,SET60     60 CHARACTER SET USED ?           00166001
00020A 4710 21B6            00216   292=         BO    COT32                YES, BRANCH                       00167001
00020E 41B0 263C            0069C   293=         LA    R11,WORDSISO         USE ISO TABLE                     00168001
000212 47F0 21BA            0021A   294=         B     COT32A                                                 00169001
                                    295=*                                                                     00170001
000216 41B0 2554            005B4   296=COT32    LA    R11,WORDSEBC         USE EBCDIC TABLE                  00171001
00021A 4130 25F6            00656   297=COT32A   LA    R3,WSYMBSTK          TABLE FOR STACK OPERATOR          00172001
00021E 43A0 6000            00000   298=         IC    R10,0(,R6)           GET ONE BYTE ALGOL SYMBOL         00173001
000222 14A9                         299=         NR    R10,R9                                                 00174001
000224 43AA 5000            00000   300=         IC    R10,0(R10,R5)                                          00175001
000228 42A0 23C0            00420   301=         STC   R10,WDEC                                               00176001
00022C 9180 23C0      00420         302=         TM    WDEC,X'80'           SOURCE OPERATOR ?                 00177001
000230 4780 21E0            00240   303=         BZ    COT32B               NO                                00178001
000234 4130 2598            005F8   304=         LA    R3,WSYMBSRC          YES, CHANGE TABLE                 00179001
000238 947F 23C0      00420         305=         NI    WDEC,X'7F'           REMOVE TAG                        00180001
00023C 43A0 23C0            00420   306=         IC    R10,WDEC                                               00181001
000240 89A0 0001            00001   307=COT32B   SLL   R10,1                MULTIPLY BY 2                     00182001
000244 48AA 3000            00000   308=         LH    R10,0(R10,R3)        CONVERT TO EBCDIC OR DISPLACEMT   00183001
000248 4190 0100            00100   309=         LA    R9,256               TEST KIND OF SYMBOL               00184001
00024C 15A9                         310=         CLR   R10,R9                                                 00185001
00024E 4740 2204            00264   311=         BL    COT11                ONE CHARACTER SYMBOL              00186001
000252 41AA B000            00000   312=         LA    R10,0(R10,R11)       ADDR WORDS ENTRY                  00187001
000256 1BBB                         313=         SR    R11,R11                                                00188001
000258 43B0 A000            00000   314=         IC    R11,0(,R10)          GET LENGTH OF SYMBOL              00189001
00025C 41A0 A001            00001   315=         LA    R10,1(,R10)          GET ADDR OF SYMBOL                00190001
000260 47F0 2180            001E0   316=         B     COT08                MOVE SYMB, GOTO NEXT INS CODE     00191001
                                    317=*                                                                     00192001
000264 1BBB                         318=COT11    SR    R11,R11              GET LENGTH-1 OF ONE-CHAR SYMBOL   00193001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

000266 42A0 E000            00000   319=           STC   R10,0(,R14)          MOVE SYMBOL TO MSG AREA          00194001
00026A 47F0 2184            001E4   320=           B     COT35                GOTO NEXT INS CODE               00195001
                                    321=*                                                                      00196001
                                    322=*          INTERNAL CHARACTERS                                         00197001
                                    323=*                                                                      00198001
00026E 4190 0005            00005   324=COT33      LA    R9,5                                                  00199001
000272 43B0 5000            00000   325=           IC    R11,0(,R5)           GET NUMBER OF INT CHARACTERS-1   00200001
000276 1BB9                         326=           SR    R11,R9                                                00201001
000278 42B0 2225            00285   327=           STC   R11,COT34+1          STORE IT IN TRANSLATE INSTR      00202001
00027C 41A0 5004            00004   328=           LA    R10,4(,R5)           GET ADDR OF SOURCE TEXT          00203001
000280 44B0 23AC            0040C   329=           EX    R11,WMOVE1                                            00204001
000284 DC00 E000 2539 00000 00599   330=COT34      TR    0(0,R14),TRINTEXT    TRANSLATE                        00205001
00028A 47F0 2184            001E4   331=           B     COT35                UPDATE PTR, GOTO NEXT INS CODE   00206001
                                    332=*                                                                      00207001
                                    333=*          TRANSLATION AND OUTPUT OF MESSAGE                           00208001
                                    334=*                                                                      00209001
00028E 9180 2522      00582         335=COT12      TM    SWTO,X'80'           MESSAGE TO CONSOLE ?             00210001
000292 4710 2286            002E6   336=           BO    COT25                YES                              00211001
                                    337=*                                                                      00212001
                                    338=*          MESSAGE TO SYSPRINT                                         00213001
                                    339=*                                                                      00214001
000296 18BE                         340=COT16      LR    R11,R14                                               00215001
000298 4190 23E4            00444   341=           LA    R9,WAREA+20          GET L'MESSAGE TEXT               00216001
00029C 1BB9                         342=           SR    R11,R9                                                00217001
00029E 4190 0046            00046   343=           LA    R9,70                GET L'TEXT ON FIRST LINE         00218001
0002A2 1BB9                         344=           SR    R11,R9               SUBTRACT IT                      00219001
0002A4 4190 0059            00059   345=           LA    R9,89                GET L'PRINTLINE                  00220001
0002A8 41A0 23D0            00430   346=           LA    R10,WAREA            GET ADDR OF ERROR MESSAGE        00221001
0002AC 45F0 22E6            00346   347=           BAL   R15,COT27            OBTAIN OUTPUT BUFFER, BLANK IT   00222001
0002B0 12BB                         348=           LTR   R11,R11              L'MSG TXT > 70 ?                 00223001
0002B2 47B0 2258            002B8   349=           BNL   COT17                YES                              00224001
0002B6 1E9B                         350=           ALR   R9,R11               OBTAIN PRTLINE LENGTH IF < 90    00225001
0002B8 4490 23B2            00412   351=COT17      EX    R9,WMOVE3            MOVE FIRST PART OF ERROR MSG     00226001
0002BC 41A9 A001            00001   352=COT20      LA    R10,1(R9,R10)        INCREASE ADDR IN WORKAREA        00227001
0002C0 12BB                         353=           LTR   R11,R11              MORE TEXT TO BE MOVED ?          00228001
0002C2 47D0 22F6            00356   354=           BNH   COT21                NO                               00229001
0002C6 4190 0046            00046   355=           LA    R9,70                YES, GET L'NEXT PRTLINE          00230001
0002CA 1BB9                         356=           SR    R11,R9               SUBTRACT IT FROM REMAIN TXTLGT   00231001
0002CC 45F0 22E6            00346   357=           BAL   R15,COT27            OBTAIN OUTPUT BUFFER, BLANK IT   00232001
0002D0 12BB                         358=           LTR   R11,R11              LENGTH > 70 ?                    00233001
0002D2 47B0 2278            002D8   359=           BNL   COT19                YES                              00234001
0002D6 1E9B                         360=           ALR   R9,R11               OBTAIN LENGTH IF LESS THAN 70    00235001
0002D8 41F0 0001            00001   361=COT19      LA    R15,1                MODIFY LENGTH FOR MOVE INSTR     00236001
0002DC 1B9F                         362=           SR    R9,R15                                                00237001
0002DE 4490 23B8            00418   363=           EX    R9,WMOVE4            MOVE TEXT TO OUTPUT BUFFER       00238001
0002E2 47F0 225C            002BC   364=           B     COT20                PUT OUT NEXT TEXTLINE IF ANY     00239001
                                    365=*                                                                      00240001
                                    366=*          MESSAGE TO WTP                                              00241001
                                    367=*                                                                      00242001
0002E6 41B0 B028            00028   368=COT25      LA    R11,40(,R11)         GET LENGTH FOR MOVE INSTRUCTION  00243001
0002EA 44B0 22DC            0033C   369=           EX    R11,EXMVC                                             00244001
                                    370=*                                                                      00245001
                                    371=COT24      WTO   '                                                    X00246001
                                     =                        ',ROUTCDE=11,DESC=7    ISSUE WTP                 00247001
0002EE 0700                         372+           CNOP  0,4                                                   01-WTO
0002F0 4510 22DA            0033A   373+COT24      BAL   1,IHB0004A                          BRANCH AROUND MESSAGE  01-WTO
0002F4 0042                         374+           DC    AL2(66)          TEXT LENGTH                          01-WTO
0002F6 8000                         375+           DC    B'1000000000000000' MCS FLAGS                         01-WTO
0002F8 4040404040404040             376+           DC    C'                                                   +01-WTO
                                     +                         '                                               01-WTO
000336 0200                         377+           DC    B'0000001000000000' DESCRIPTOR CODES                  01-WTO
000338 0020                         378+           DC    B'0000000000100000' ROUTING CODES                     01-WTO
00033A                              379+IHB0004A DS    0H                                                      01-WTO
00033A 0A23                         380+           SVC   35                                                    01-WTO
                                    381=*                                                                      00248001
00033C D200 2298 23D0 002F8 00430   382=EXMVC      MVC   COT24+8(0),WAREA     MOVE MESSAGE                     00249001
                                    383=*                                                                      00250001
000342 47F0 2396            003F6   384=           B     WDIRET2              TERMINATE                        00251001
                                    385=*                                                                      00252001
                                    386=*          OBTAIN OUTPUT BUFFER                                        00253001
                                    387=*                                                                      00254001
000346 90EF 2524            00584   388=COT27      STM   R14,R15,SVAR2        SAVE REGS FOR CALL OF PRINT RTN  00255001
00034A 58F0 D0B8            000B8   389=           L     R15,PRTRTADD         LOAD ADDR OF PRINT ROUTINE       00256001
00034E 05EF                         390=           BALR  R14,R15              CALL PRINT ROUTINE               00257001
000350 98EF 2524            00584   391=           LM    R14,R15,SVAR2        RESTORE REGS                     00258001
000354 07FF                         392=           BR    R15                                                   00259001
                                    393=*                                                                      00260001
                                    394=*          GOTO NEXT MESSAGE OR TERMINATE                              00261001
                                    395=*                                                                      00262001
000356 1B99                         396=COT21      SR    R9,R9                                                 00263001
000358 4390 5000            00000   397=           IC    R9,0(,R5)            GET L'TREATED ENTRY              00264001
00035C 1A59                         398=           AR    R5,R9                POINT TO NEXT ENTRY              00265001
00035E 5890 D0C0            000C0   399=           L     R9,NEXTERR           GET ADDR OF FIRST FREE ENTRY     00266001
000362 1959                         400=           CR    R5,R9                NEXT ENTRY = FIRST FREE ?        00267001
000364 4740 2056            000B6   401=           BL    COT01                NO, HANDLE NEXT ENTRY            00268001
000368 41A0 2396            003F6   402=           LA    R10,WDIRET2          LOAD NEW RETURN ADDR             00269001
00036C 50A0 D090            00090   403=           ST    R10,ERET                                              00270001
000370 58A0 D0BC            000BC   404=           L     R10,ERRPOOL          YES, POOL EXHAUSTED, ZERO PTR    00271001
000374 50A0 D0C0            000C0   405=           ST    R10,NEXTERR                                           00272001
000378 9108 D080      00080         406=           TM    COMPFLGS,TERR        TERMINATING ERROR ?              00273001
00037C 98EF 252C            0058C   407=COT28      LM    R14,R15,SVAR1        LOAD RETURN ADDR AND BASE        00274001
000380 4710 2326            00386   408=           BO    COT29                YES                              00275001
000384 07FE                         409=           BR    R14                  RETURN                           00276001
                                    410=*                                                                      00277001
                                    411=COT29      XCTL  EP=IEX51002          BRANCH TO TERMINATION            00278001
000386                              412+COT29      DS    0H                                                    01-XCTL
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000386 0700                        413+         CNOP  0,4                                                02-IHBIN
000388 45F0 233C            0039C  414+         BAL   15,*+20            BRANCH AROUND CONSTANTS         02-IHBIN
00038C 00000394                    415+         DC    A(*+8)             ADDR. OF PARM. LIST             02-IHBIN
000390 00000000                    416+         DC    A(0)                DCB ADDRESS PARAMETER          02-IHBIN
000394 C9C5E7F5F1F0F0F2            417+         DC    CL8'IEX51002'       EP PARAMETER                   02-IHBIN
00039C 0A07                        418+         SVC   7                              ISSUE XCTL SVC      01-XCTL
                                   419=*                                                                 00279001
                                   420=*        ACTION TO BE PERFORMED AFTER I/O ERROR OR PROGRAM        00280001
                                   421=*        INTERRUPTION                                             00281001
                                   422=*                                                                 00282001
00039E 9180 D082      00082        423=WDIRET1  TM    COMPFLGS+2,PRT          SYSPRINT ERROR ?           00283001
0003A2 4780 234E            003AE  424=         BZ    COT18A                  NO                         00284001
0003A6 9680 2522      00582        425=COT18    OI    SWTO,X'80'              YES, SET SWITCH ON         00285001
0003AA 47F0 239E            003FE  426=         B     LAST                                               00286001
                                   427=*                                                                 00287001
0003AE 9108 D081      00081        428=COT18A   TM    COMPFLGS+1,ERR          PROGRAM INTERRUPT ?        00288001
0003B2 4780 239E            003FE  429=         BZ    LAST                    NO                         00289001
0003B6 4170 00D3            000D3  430=         LA    R7,211                  YES, GET MESSAGE NUMBER    00290001
0003BA 48A0 2520            00580  431=         LH    R10,MODNUMB             MODIFY IT                  00291001
0003BE 1B7A                        432=         SR    R7,R10                                             00292001
0003C0 8970 0002            00002  433=         SLL   R7,2                    GET ENTRY IN ADDR TABLE    00293001
0003C4 5890 251C            0057C  434=         L     R9,AWADDTAB                                        00294001
0003C8 1A79                        435=         AR    R7,R9                   GET ADDR OF MESSAGE        00295001
0003CA 5870 7000            00000  436=         L     R7,0(,R7)                                          00296001
0003CE 45F0 22E6            00346  437=         BAL   R15,COT27               GET PRINT BUFFER           00297001
0003D2 D213 1000 2504 00000 00564  438=         MVC   0(20,R1),CPI            MOVE MSG CODE ETC          00298001
0003D8 D232 1014 7000 00014 00000  439=         MVC   20(51,R1),0(R7)         MOVE MSG TEXT              00299001
0003DE 45F0 22E6            00346  440=         BAL   R15,COT27               GET PRINT BUFFER           00300001
0003E2 5890 D0C0            000C0  441=         L     R9,NEXTERR              GET ADDR OF PSW            00301001
0003E6 41A0 0010            00010  442=         LA    R10,16                                             00302001
0003EA 1B9A                        443=         SR    R9,R10                                             00303001
0003EC D20F 1014 9000 00014 00000  444=         MVC   20(16,R1),0(R9)         MOVE PSW                   00304001
0003F2 924B 1025      00025        445=         MVI   37(R1),C'.'             INSERT PERIOD              00305001
                                   446=*                                                                 00306001
0003F6 9680 D081      00081        447=WDIRET2  OI    COMPFLGS+1,NSRCE        SET BIT FOR TERMINATING ERROR  00307001
0003FA 47F0 2326            00386  448=         B     COT29                   BRANCH TO TERMINATION      00308001
                                   449=*                                                                 00309001
                                   450=*        HANDLE LAST ERROR PATTERN                                00310001
                                   451=*                                                                 00311001
0003FE 5850 D0C0            000C0  452=LAST     L     R5,NEXTERR              GET ADDR OF FIRST FREE ENTRY   00312001
000402 41A0 000C            0000C  453=         LA    R10,12                  GET ADDR OF LAST PATTERN   00313001
000406 1B5A                        454=         SR    R5,R10                                             00314001
000408 47F0 2056            000B6  455=         B     COT01                   GOTO NORMAL TREATMENT      00315001
                                   456=*                                                                 00316001
                                   457=*        WORKAREAS AND MOVE INSTRUCTIONS                          00317001
                                   458=*                                                                 00318001
00040C                             459=         CNOP  0,4                                                00319001
00040C D200 E000 A000 00000 00000  460=WMOVE1   MVC   0(0,R14),0(R10)                                    00320001
000412 D200 1000 A000 00000 00000  461=WMOVE3   MVC   0(0,R1),0(R10)                                     00321001
000418 D200 1014 A000 00014 00000  462=WMOVE4   MVC   20(0,R1),0(R10)                                    00322001
                                   463=*                                                                 00323001
00041E 0000
000420 0000000000000000            464=WDEC     DC    2D'0'                                              00324001
000430 C9C5E7F0F0F0C940            465=WAREA    DC    C'IEX000I  0  00000   '                            00325001
000444 4040404040404040            466=         DC    250C' '                                            00326001
                                   467=*                                                                 00327001
                                   468=*        HEADINGS AND MESSAGE 211 (PART OF)                       00328001
                                   469=*                                                                 00329001
00053E C4C9C1C7D5D6E2E3            470=HEADD1   DC    C'DIAGNOSTICS'                                     00330001
000549 C3D6C4C540404040            471=HEADD2   DC    C'CODE     SEV  SC      MESSAGE'                     00331001
                                   472=*                                                                 00332001
000564 C9C5E7F2F1F1C940            473=CPI      DC    C'IEX211I   T           ' FIRST PART OF MESSAGE 211  00333001
                                   474=*                                                                 00334001
                                   475=*        ADDRESSES AND CONSTANT                                   00335001
                                   476=*                                                                 00336001
000578 00000000                    477=AWEMPOOL DC    F'0'                    ADDR OF MESSAGE TEXTS      00337001
00057C 00000000                    478=AWADDTAB DC    F'0'                    ADDR OF ADDR TABLE         00338001
000580 0000                        479=MODNUMB  DC    H'0'                    MODIFICATION NUMBER        00339001
                                   480=*                                                                 00340001
                                   481=*        VARIOUS                                                  00341001
                                   482=*                                                                 00342001
000582 00                          483=SWTO     DC    X'00'                   SWITCH FOR OUTPUT ON CONSOLE   00343001
000583 00
000584 0000000000000000            484=SVAR2    DC    2F'0'                   TO SAVE LINKREGS FOR PRINT RTN   00344001
00058C 0000000000000000            485=SVAR1    DC    2F'0'                   TO SAVE RETURN ADDR AND BASE   00345001
000594 4040404040                  486=BLANKS   DC    CL5' '                                             00346001
                                   487=*                                                                 00347001
                                   488=*        TABLES FOR CONVERSION AND TRANSLATION                    00348001
                                   489=*                                                                 00349001
                                   490=*        TRANSLATE INTERNAL CHARS TO EBCDIC                       00350001
                                   491=*                                                                 00351001
000599 4E605C617B7B4D7A            492=TRINTEXT DC    C'+-*/##(:'             00 -> 07                   00352001
0005A1 AD7B7B5E7B7B7B7B            493=         DC    C'[##;####'             08 -> 0F                   00353001
0005A9 7E4C6E7B7B7B7B7B            494=         DC    C'=<>#####'             10 -> 17                   00354001
0005B1 7B7B7B7B7B7B7B7B            495=         DC    C'########'             18 -> 1F                   00355001
0005B9 5F7B4F507B6B5D7A            496=         DC    C'¬#|&&#,):'            20 -> 27                   00356001
0005C1 BD7B7B407B4B7D7B            497=         DC    C']## #.''#'            28 -> 2F                   00357001
0005C9 F0F1F2F3F4F5F6F7            498=         DC    C'01234567'             30 -> 37                   00358001
0005D1 F8F97B7B7B7B4B7D            499=         DC    C'89####.'''            38 -> 3F                   00359001
0005D9 C1C2C3C4C5C6C7C8            500=         DC    C'ABCDEFGH'             40 -> 47                   00360001
0005E1 C9D1D2D3D4D5D6D7            501=         DC    C'IJKLMNOP'             48 -> 4F                   00361001
0005E9 D8D9E2E3E4E5E6E7            502=         DC    C'QRSTUVWX'             50 -> 57                   00362001
0005F1 E8E95B6D7B7C                503=         DC    C'YZ$_#@'               58 -> 5D                   00363001
                                   504=*                                                                 00364001
                                   505=*                                                                 00365001
                                   506=*        CONVERSION OF SOURCE OPERATORS                           00366001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

                                    507=*                                                                      00367001
0005F7 00
0005F8                              508=         DC    0F'0'                                                   00368001
0005F8 00                           509=WSYMBSRC DC    X'00'                    00         PLUS                00369001
0005F9 4E                           510=         DC    C'+'                                                    00370001
0005FA 00                           511=         DC    X'00'                    01         MINUS               00371001
0005FB 60                           512=         DC    C'-'                                                    00372001
0005FC 00                           513=         DC    X'00'                    02         MULTIPLY            00373001
0005FD 5C                           514=         DC    C'*'                                                    00374001
0005FE 00                           515=         DC    X'00'                    03         DIVIDE              00375001
0005FF 61                           516=         DC    C'/'                                                    00376001
000600 0100                         517=         DC    H'256'                   04         INTEGER DIVIDE      00377001
000602 0104                         518=         DC    H'260'                   05         'POWER'             00378001
000604 00                           519=         DC    X'00'                    06         LEFT PARENTHESIS    00379001
000605 4D                           520=         DC    C'('                                                    00380001
000606 010C                         521=         DC    H'268'                   07         COLON               00381001
000608 010F                         522=         DC    H'271'                   08         LEFT BRACKET        00382001
00060A 0112                         523=         DC    H'274'                   09         'ARRAY'             00383001
00060C 011A                         524=         DC    H'282'                   0A         'SWITCH'            00384001
00060E 0123                         525=         DC    H'291'                   0B         SEMICOLON           00385001
000610 0126                         526=         DC    H'294'                   0C         'BEGIN'             00386001
000612 0126                         527=         DC    H'294'                   0D         'BEGIN'             00387001
000614 01D5                         528=         DC    H'469'                   0E         'PROCEDURE'         00388001
000616 01D5                         529=         DC    H'469'                   0F         'PROCEDURE'         00389001
000618 012E                         530=         DC    H'302'                   10         'EQUAL'             00390001
00061A 0136                         531=         DC    H'310'                   11         'LESS'              00391001
00061C 013D                         532=         DC    H'317'                   12         'GREATER'           00392001
00061E 0147                         533=         DC    H'327'                   13         'NOTEQUAL'          00393001
000620 0152                         534=         DC    H'338'                   14         'NOTGREATER         00394001
000622 015F                         535=         DC    H'351'                   15         'NOTLESS'           00395001
000624 0169                         536=         DC    H'361'                   16         COLON EQUAL         00396001
000626 016C                         537=         DC    H'364'                   17         'GOTO'              00397001
000628 0173                         538=         DC    H'371'                   18         'FOR'               00398001
00062A 0179                         539=         DC    H'377'                   19         'STEP'              00399001
00062C 0180                         540=         DC    H'384'                   1A         'UNTIL'             00400001
00062E 0188                         541=         DC    H'392'                   1B         'WHILE'             00401001
000630 0190                         542=         DC    H'400'                   1C         'DO'                00402001
000632 0195                         543=         DC    H'405'                   1D         'IF'                00403001
000634 019A                         544=         DC    H'410'                   1E         'THEN'              00404001
000636 01A1                         545=         DC    H'417'                   1F         'ELSE'              00405001
000638 01A8                         546=         DC    H'424'                   20         'NOT'               00406001
00063A 01AE                         547=         DC    H'430'                   21         'IMPL'              00407001
00063C 01B5                         548=         DC    H'437'                   22         'OR'                00408001
00063E 01BA                         549=         DC    H'442'                   23         'AND'               00409001
000640 01C0                         550=         DC    H'448'                   24         'EQUIV'             00410001
000642 00                           551=         DC    X'00'                    25         COMMA               00411001
000643 6B                           552=         DC    C','                                                    00412001
000644 00                           553=         DC    X'00'                    26         RIGHT PARENTHESIS   00413001
000645 5D                           554=         DC    C')'                                                    00414001
000646 010C                         555=         DC    H'268'                   27         COLON               00415001
000648 01C8                         556=         DC    H'456'                   28         RIGHT SUBSCRIPT BRACK 00416001
00064A 0123                         557=         DC    H'291'                   29         DELTA               00417001
00064C 01CB                         558=         DC    H'459'                   2A         'END'               00418001
00064E 0123                         559=         DC    H'291'                   2B         ETA                 00419001
000650 01CB                         560=         DC    H'459'                   2C         'END'               00420001
000652 00                           561=         DC    X'00'                    2D         OMEGA               00421001
000653 40                           562=         DC    C' '                                                    00422001
000654 01E1                         563=         DC    H'481'                   2E         'CODE'              00423001
                                    564=*                                                                      00424001
                                    565=*        CONVERSION OF STACK OPERATORS                                 00425001
                                    566=*                                                                      00426001
000656 00                           567=WSYMBSTK DC    X'00'                    00         PLUS                00427001
000657 4E                           568=         DC    C'+'                                                    00428001
000658 00                           569=         DC    X'00'                    01         MINUS               00429001
000659 60                           570=         DC    C'-'                                                    00430001
00065A 00                           571=         DC    X'00'                    02         MULTIPLY            00431001
00065B 5C                           572=         DC    C'*'                                                    00432001
00065C 00                           573=         DC    X'00'                    03         DIVIDE              00433001
00065D 61                           574=         DC    C'/'                                                    00434001
00065E 0100                         575=         DC    H'256'                   04         INTEGER DIVIDE      00435001
000660 0104                         576=         DC    H'260'                   05         'POWER'             00436001
000662 00                           577=         DC    X'00'                    06         LEFT PARENTHESIS    00437001
000663 4D                           578=         DC    C'('                                                    00438001
000664 010C                         579=         DC    H'268'                   07         COLON               00439001
000666 010F                         580=         DC    H'271'                   08         LEFT BRACKET        00440001
000668 0112                         581=         DC    H'274'                   09         'ARRAY'             00441001
00066A 011A                         582=         DC    H'282'                   0A         'SWITCH'            00442001
00066C 0123                         583=         DC    H'291'                   0B         SEMICOLON           00443001
00066E 0126                         584=         DC    H'294'                   0C         'BEGIN'             00444001
000670 0126                         585=         DC    H'294'                   0D         'BEGIN'             00445001
000672 01D5                         586=         DC    H'469'                   0E         'PROCEDURE'         00446001
000674 01D5                         587=         DC    H'469'                   0F         'PROCEDURE'         00447001
000676 012E                         588=         DC    H'302'                   10         'EQUAL'             00448001
000678 0136                         589=         DC    H'310'                   11         'LESS'              00449001
00067A 013D                         590=         DC    H'317'                   12         'GREATER'           00450001
00067C 0147                         591=         DC    H'327'                   13         'NOTEQUAL'          00451001
00067E 0152                         592=         DC    H'338'                   14         'NOTGREATER         00452001
000680 015F                         593=         DC    H'351'                   15         'NOTLESS'           00453001
000682 0169                         594=         DC    H'361'                   16         COLON EQUAL         00454001
000684 016C                         595=         DC    H'364'                   17         'GOTO'              00455001
000686 0173                         596=         DC    H'371'                   18         'FOR'               00456001
000688 0179                         597=         DC    H'377'                   19         'STEP'              00457001
00068A 0180                         598=         DC    H'384'                   1A         'UNTIL'             00458001
00068C 0188                         599=         DC    H'392'                   1B         'WHILE'             00459001
00068E 0190                         600=         DC    H'400'                   1C         'DO'                00460001
000690 0195                         601=         DC    H'405'                   1D         'IF'                00461001
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  Loc  Object Code     Addr1 Addr2  Stmt    Source Statement                                  X390 3.1.04  2012/08/17 13.13

000692 019A                         602=            DC    H'410'          1E        'THEN'           00462001
000694 01A1                         603=            DC    H'417'          1F        'ELSE'           00463001
000696 01A8                         604=            DC    H'424'          20        'NOT'            00464001
000698 01AE                         605=            DC    H'430'          21        'IMPL'           00465001
00069A 01B5                         606=            DC    H'437'          22        'OR'             00466001
00069C 01BA                         607=            DC    H'442'          23        'AND'            00467001
00069E 01C0                         608=            DC    H'448'          24        'EQUIV'          00468001
0006A0 00                           609=            DC    X'00'           25        ALPHA            00469001
0006A1 40                           610=            DC    C' '                                       00470001
0006A2 0195                         611=            DC    H'405'          26        IFS              00471001
0006A4 019A                         612=            DC    H'410'          27        THENS            00472001
0006A6 01A1                         613=            DC    H'417'          28        ELSES            00473001
0006A8 00                           614=            DC    X'00'           29        LEFT PARENTHESIS 00474001
0006A9 4D                           615=            DC    C'('                                       00475001
0006AA 00                           616=            DC    X'00'           2A        LEFT PARENTHESIS 00476001
0006AB 4D                           617=            DC    C'('                                       00477001
0006AC 00                           618=            DC    X'00'           2B        MONADIC MINUS    00478001
0006AD 60                           619=            DC    C'-'                                       00479001
0006AE 010F                         620=            DC    H'271'          2C        LEFT SUBSCRIPT BRACKET 00480001
0006B0 0169                         621=            DC    H'361'          2D        COLON EQUAL      00481001
0006B2 0169                         622=            DC    H'361'          2E        COLON EQUAL      00482001
                                    623=*                                                            00483001
                                    624=*           COMPOUND ALGOL SYMBOLS, EBCDIC                   00484001
                                    625=*                                                            00485001
0006B4                              626=            DC    0F'0'                                      00486001
                      005B4         627=WORDSEBC EQU   *-256                                         00487001
0006B4 02                           628=            DC    X'02'           256       INTEGER DIVIDE   00488001
0006B5 7D617D                       629=            DC    C'''/'''                                   00489001
0006B8 01                           630=            DC    X'01'           260       POWER            00490001
0006B9 5C5C4040404040               631=            DC    C'**     '                                 00491001
0006C0 00                           632=            DC    X'00'           268       COLON            00492001
0006C1 7A40                         633=            DC    C': '                                      00493001
0006C3 01                           634=            DC    X'01'           271       LEFT BRACKET     00494001
0006C4 4D61                         635=            DC    C'(/'                                      00495001
0006C6 06                           636=            DC    X'06'           274       'ARRAY'          00496001
0006C7 7DC1D9D9C1E87D               637=            DC    C'''ARRAY'''                               00497001
0006CE 07                           638=            DC    X'07'           282       'SWITCH'         00498001
0006CF 7DE2E6C9E3C3C87D             639=            DC    C'''SWITCH'''                              00499001
0006D7 00                           640=            DC    X'00'           291       SEMICOLON        00500001
0006D8 5E40                         641=            DC    C'; '                                      00501001
0006DA 06                           642=            DC    X'06'           294       'BEGIN'          00502001
0006DB 7DC2C5C7C9D57D               643=            DC    C'''BEGIN'''                               00503001
0006E2 00                           644=            DC    X'00'           302       EQUAL            00504001
0006E3 7E404040404040               645=            DC    C'=      '                                 00505001
0006EA 00                           646=            DC    X'00'           310       LESSTHAN         00506001
0006EB 4C4040404040                 647=            DC    C'<     '                                  00507001
0006F1 00                           648=            DC    X'00'           317       GREATER THAN     00508001
0006F2 6E40404040404040             649=            DC    C'>        '                               00509001
0006FB 01                           650=            DC    X'01'           327       NOT EQUAL        00510001
0006FC 5F7E404040404040             651=            DC    C'¬=        '                              00511001
000706 01                           652=            DC    X'01'           338       LESS THAN OR EQU 00512001
000707 4C7E404040404040             653=            DC    C'<=          '                            00513001
000713 01                           654=            DC    X'01'           351       GR THAN OR EQU   00514001
000714 6E7E404040404040             655=            DC    C'>=       '                               00515001
00071D 01                           656=            DC    X'01'           361       COLON EQUAL      00516001
00071E 7A7E                         657=            DC    C':='                                      00517001
000720 05                           658=            DC    X'05'           364       'GOTO'           00518001
000721 7DC7D6E3D67D                 659=            DC    C'''GOTO'''                                00519001
000727 04                           660=            DC    X'04'           371       'FOR'            00520001
000728 7DC6D6D97D                   661=            DC    C'''FOR'''                                 00521001
00072D 03                           662=            DC    X'03'           377       'STEP'           00522001
00072E 7DE2E3C5D77D                 663=            DC    C'''STEP'''                                00523001
000734 06                           664=            DC    X'06'           384       'UNTIL'          00524001
000735 7DE4D5E3C9D37D               665=            DC    C'''UNTIL'''                               00525001
00073C 06                           666=            DC    X'06'           392       'WHILE'          00526001
00073D 7DE6C8C9D3C57D               667=            DC    C'''WHILE'''                               00527001
000744 03                           668=            DC    X'03'           400       'DO'             00528001
000745 7DC4D67D                     669=            DC    C'''DO'''                                  00529001
000749 03                           670=            DC    X'03'           405       'IF'             00530001
00074A 7DC9C67D                     671=            DC    C'''IF'''                                  00531001
00074E 05                           672=            DC    X'05'           410       'THEN'           00532001
00074F 7DE3C8C5D57D                 673=            DC    C'''THEN'''                                00533001
000755 05                           674=            DC    X'05'           417       'ELSE'           00534001
000756 7DC5D3E2C57D                 675=            DC    C'''ELSE'''                                00535001
00075C 00                           676=            DC    X'00'           424       NOT              00536001
00075D 5F40404040                   677=            DC    C'¬    '                                   00537001
000762 05                           678=            DC    X'05'           430       'IMPL'           00538001
000763 7DC9D4D7D37D                 679=            DC    C'''IMPL'''                                00539001
000769 00                           680=            DC    X'00'           437       OR               00540001
00076A 4F404040                     681=            DC    C'|   '                                    00541001
00076E 00                           682=            DC    X'00'           442       AND              00542001
00076F 5040404040                   683=            DC    C'&&    '                                  00543001
000774 06                           684=            DC    X'06'           448       'EQUIV'          00544001
000775 7DC5D8E4C9E57D               685=            DC    C'''EQUIV'''                               00545001
00077C 01                           686=            DC    X'01'           456       RIGHT BRACKET    00546001
00077D 615D                         687=            DC    C'/)'                                      00547001
00077F 04                           688=            DC    X'04'           459       'END'            00548001
000780 7DC5D5C47D                   689=            DC    C'''END'''                                 00549001
000785 02                           690=            DC    X'02'           465       LEFT STRINGQUOTE 00550001
000786 7D4D7D                       691=            DC    C'''('''                                   00551001
000789 0A                           692=            DC    X'0A'           469       'PROCEDURE'      00552001
00078A 7DD7D9D6C3C5C4E4             693=            DC    C'''PROCEDURE'''                           00553001
000795 05                           694=            DC    X'05'           481       'CODE'           00554001
000796 7DC3D6C4C57D                 695=            DC    C'''CODE'''                                00555001
                                    696=*                                                            00556001
00079C                              697=            DS    0F                                         00557001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                      0069C         698=WORDSISO EQU   *-256              LIST OF COMPOUND ALGOL SYMBOLS, ISO  00558001
00079C 02                           699=         DC    X'02'                256       INTEGER DIVIDE         00559001
00079D 7D617D                       700=         DC    C'''/'''                                              00560001
0007A0 06                           701=         DC    X'06'                260       'POWER'                00561001
0007A1 7DD7D6E6C5D97D               702=         DC    C'''POWER'''                                          00562001
0007A8 01                           703=         DC    X'01'                268       COLON                  00563001
0007A9 4B4B                         704=         DC    C'..'                                                 00564001
0007AB 01                           705=         DC    X'01'                271       LEFT BRACKET           00565001
0007AC 4D61                         706=         DC    C'(/'                                                 00566001
0007AE 06                           707=         DC    X'06'                274       'ARRAY'                00567001
0007AF 7DC1D9D9C1E87D               708=         DC    C'''ARRAY'''                                          00568001
0007B6 07                           709=         DC    X'07'                282       'SWITCH'               00569001
0007B7 7DE2E6C9E3C3C87D             710=         DC    C'''SWITCH'''                                         00570001
0007BF 01                           711=         DC    X'01'                291       SEMICOLON              00571001
0007C0 4B6B                         712=         DC    C'.,'                                                 00572001
0007C2 06                           713=         DC    X'06'                294       'BEGIN'                00573001
0007C3 7DC2C5C7C9D57D               714=         DC    C'''BEGIN'''                                          00574001
0007CA 06                           715=         DC    X'06'                302       'EQUAL'                00575001
0007CB 7DC5D8E4C1D37D               716=         DC    C'''EQUAL'''                                          00576001
0007D2 05                           717=         DC    X'05'                310       'LESS'                 00577001
0007D3 7DD3C5E2E27D                 718=         DC    C'''LESS'''                                           00578001
0007D9 08                           719=         DC    X'08'                317       'GREATER'              00579001
0007DA 7DC7D9C5C1E3C5D9             720=         DC    C'''GREATER'''                                        00580001
0007E3 09                           721=         DC    X'09'                327       'NOTEQUAL'             00581001
0007E4 7DD5D6E3C5D8E4C1             722=         DC    C'''NOTEQUAL'''                                       00582001
0007EE 0B                           723=         DC    X'0B'                338       'NOTGREATER'           00583001
0007EF 7DD5D6E3C7D9C5C1             724=         DC    C'''NOTGREATER'''                                     00584001
0007FB 08                           725=         DC    X'08'                351       'NOTLESS'              00585001
0007FC 7DD5D6E3D3C5E2E2             726=         DC    C'''NOTLESS'''                                        00586001
000805 01                           727=         DC    X'01'                361       COLON EQUAL            00587001
000806 4B7E                         728=         DC    C'.='                                                 00588001
000808 05                           729=         DC    X'05'                364       'GOTO'                 00589001
000809 7DC7D6E3D67D                 730=         DC    C'''GOTO'''                                           00590001
00080F 04                           731=         DC    X'04'                371       'FOR'                  00591001
000810 7DC6D6D97D                   732=         DC    C'''FOR'''                                            00592001
000815 03                           733=         DC    X'03'                377       'STEP'                 00593001
000816 7DE2E3C5D77D                 734=         DC    C'''STEP'''                                           00594001
00081C 06                           735=         DC    X'06'                384       'UNTIL'                00595001
00081D 7DE4D5E3C9D37D               736=         DC    C'''UNTIL'''                                          00596001
000824 06                           737=         DC    X'06'                392       'WHILE'                00597001
000825 7DE6C8C9D3C57D               738=         DC    C'''WHILE'''                                          00598001
00082C 03                           739=         DC    X'03'                400       'DO'                   00599001
00082D 7DC4D67D                     740=         DC    C'''DO'''                                             00600001
000831 03                           741=         DC    X'03'                405       'IF'                   00601001
000832 7DC9C67D                     742=         DC    C'''IF'''                                             00602001
000836 05                           743=         DC    X'05'                410       'THEN'                 00603001
000837 7DE3C8C5D57D                 744=         DC    C'''THEN'''                                           00604001
00083D 05                           745=         DC    X'05'                417       'ELSE'                 00605001
00083E 7DC5D3E2C57D                 746=         DC    C'''ELSE'''                                           00606001
000844 04                           747=         DC    X'04'                424       'NOT'                  00607001
000845 7DD5D6E37D                   748=         DC    C'''NOT'''                                            00608001
00084A 05                           749=         DC    X'05'                430       'IMPL'                 00609001
00084B 7DC9D4D7D37D                 750=         DC    C'''IMPL'''                                           00610001
000851 03                           751=         DC    X'03'                437       'OR'                   00611001
000852 7DD6D97D                     752=         DC    C'''OR'''                                             00612001
000856 04                           753=         DC    X'04'                442       'AND'                  00613001
000857 7DC1D5C47D                   754=         DC    C'''AND'''                                            00614001
00085C 06                           755=         DC    X'06'                448       'EQUIV'                00615001
00085D 7DC5D8E4C9E57D               756=         DC    C'''EQUIV'''                                          00616001
000864 01                           757=         DC    X'01'                456       RIGHT BRACKET          00617001
000865 615D                         758=         DC    C'/)'                                                 00618001
000867 04                           759=         DC    X'04'                459       'END'                  00619001
000868 7DC5D5C47D                   760=         DC    C'''END'''                                            00620001
00086D 02                           761=         DC    X'02'                465       LEFT STRINGQUOTE       00621001
00086E 7D4D7D                       762=         DC    C'''('''                                              00622001
000871 0A                           763=         DC    X'0A'                469       'PROCEDURE'            00623001
000872 7DD7D9D6C3C5C4E4             764=         DC    C'''PROCEDURE'''                                      00624001
00087D 05                           765=         DC    X'05'                481       'CODE'                 00625001
00087E 7DC3D6C4C57D                 766=         DC    C'''CODE'''                                           00626001
                                    767=*                                                                    00627001
                                    768=*        END OF IEX60000                                             00628001
                                    769=*                                                                    00629001
                                    770 *                                                                    00114001
000000                00000 00CB6   771 WORKAREA DSECT                                                       00115001
                                    772 *                                                                    00116001
                                    773          COPY  WORKAREA                                              00117001
                                    774=*                                                                    00001001
                                    775=*        WORKAREA - MAPPING CSECT IEX00001                           00002001
                                    776=*                                                                    00003001
                                    777=*        ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT 00004001
                                    778=*                                                                    00005001
000000 0000000000000000             779=SAVEAREA DC    18F'0'                                                00006001
                                    780=*                                                                    00007001
                                    781=*        DCB ADDRS                                                   00008001
                                    782=*                                                                    00009001
000048                              783=DCBTABLE DC    0F'0'                                                 00010001
000048 00000000                     784=ALINDCB  DC    A(0)                                                  00011001
00004C 00000000                     785=         DC    A(0)                                                  00012001
000050 00000000                     786=         DC    A(0)                                                  00013001
000054 00000000                     787=         DC    A(0)                                                  00014001
000058 00000000                     788=ASYSDCB  DC    A(0)                                                  00015001
00005C 00000000                     789=APRTDCB  DC    A(0)                                                  00016001
000060 00000000                     790=APCHDCB  DC    A(0)                                                  00017001
000064 00000000                     791=AUT1DCB  DC    A(0)                                                  00018001
000068 00000000                     792=AUT2DCB  DC    A(0)                                                  00019001
00006C 00000000                     793=AUT3DCB  DC    A(0)                                                  00020001
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    794=*                                                              00021001
                                    795=*        END OF DATA EXIT ADDRS                                00022001
                                    796=*                                                              00023001
000070 00000000                     797=EODUT1   DC    A(0)                    SYSUT1                  00024001
000074 00000000                     798=EODUT2   DC    A(0)                    SYSUT2                  00025001
000078 00000000                     799=EODUT3   DC    A(0)                    SYSUT3                  00026001
00007C 00000000                     800=EODIN    DC    A(0)                    SYSIN                   00027001
                                    801=*                                                              00028001
                                    802=*        OPTION SWITCHES IN COMPFLGS                           00029001
                                    803=*                                                              00030001
                                    804=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -         00031001
                                    805=*                                                              00032001
                                    806=*        PURPOSE                   POSITION                    00033001
                                    807=*                                  BYTE 1    BYTE 2    BYTE 3  00034001
                                    808=*                                  01234567  01234567  01234567 00035001
                                    809=*                                                              00036001
                                    810=*        COMPMODE (SYNTAX CHECK)   X                           00037001
                                    811=*        SUBSCRIPT OPTIMIZATION     X                          00038001
                                    812=*        WARNING ERROR               X                         00039001
                                    813=*        SERIOUS ERROR                X                        00040001
                                    814=*        TERMINATING ERROR             X                       00041001
                                    815=*        PROCEDURE/PROGRAM              X                      00042001
                                    816=*        LONG/SHORT PRECISION            X                     00043001
                                    817=*        OPERAND                          X                    00044001
                                    818=*                                                              00045001
                                    819=*        NOSOURCE/SOURCE                     X                 00046001
                                    820=*        NOLOAD/LOAD                          X                00047001
                                    821=*        NODECK/DECK                           X               00048001
                                    822=*        ISO/EBCDIC                             X              00049001
                                    823=*        PROGRAM INTERRUPT                       X             00050001
                                    824=*        TERMINATING PHASE ENTERED                X            00051001
                                    825=*        NO BUFFERS ASSIGNED                       X           00052001
                                    826=*        NO COMPILATION POSSIBLE                    X          00053001
                                    827=*                                                              00054001
                                    828=*        SYSPRINT DOWN                                 X       00055001
                                    829=*        WHOLE SOURCE PROG IN CORE                      X      00056001
                                    830=*        NO OPTAB                                        X     00057001
                                    831=*        SYSPRINT NOT OPENED                              X    00058001
                                    832=*        ERROR UNRELATED TO SEMICOLON NR                   X   00059001
                                    833=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)     X  00060001
                                    834=*        60 CHARACTER SET                                    X 00061001
                                    835=*        (RESERVED)                                           X 00062001
                                    836=*                                                              00063001
000080 00220000                     837=COMPFLGS DC    X'00220000'             PARAMETERS AND SWITCHES 00064001
                                    838=*                                                              00065001
                                    839=*        OPTION SWITCHES IN COMPFLGS                           00066001
                                    840=*                                                              00067001
                      00080         841=COMPMODE EQU   X'80'                   SYNTAX CHECK MODE       00068001
                      00040         842=SUBSCOPT EQU   X'40'                   SUBSCRIPT OPTIMIZATION  00069001
                      000FB         843=PGR      EQU   X'FB'                                           00070001
                      00004         844=PROC     EQU   X'04'                   PRECOMPILED PROCEDURE   00071001
                                    845=*                                                              00072001
                      000FD         846=SHRT     EQU   X'FD'                                           00073001
                      00002         847=LNG      EQU   X'02'                                           00074001
                      00001         848=OPERAND  EQU   X'01'                                           00075001
                                    849=*                                                              00076001
                                    850=*        ERROR SEVERITY INDICATORS IN COMPFLGS                 00077001
                                    851=*                                                              00078001
                      00020         852=WERR     EQU   X'20'                   WARNING ERROR           00079001
                      00010         853=SERR     EQU   X'10'                   SERIOUS ERROR           00080001
                      00008         854=TERR     EQU   X'08'                   TERMINATING ERROR       00081001
                                    855=*                                                              00082001
                                    856=*        OPTION SWITCHES IN COMPFLGS+1                         00083001
                                    857=*                                                              00084001
                      0007F         858=SRCE     EQU   X'7F'                                           00085001
                      00080         859=NSRCE    EQU   X'80'                                           00086001
                                    860=*                                                              00087001
                      000BF         861=LOAD     EQU   X'BF'                                           00088001
                      00040         862=NLOAD    EQU   X'40'                                           00089001
                                    863=*                                                              00090001
                      000DF         864=DECK     EQU   X'DF'                                           00091001
                      00020         865=NDECK    EQU   X'20'                                           00092001
                                    866=*                                                              00093001
                      000EF         867=EBCDIC   EQU   X'EF'                                           00094001
                      00010         868=ISO      EQU   X'10'                                           00095001
                                    869=*                                                              00096001
                                    870=*        TERMINATION SWITCHES IN COMPFLGS+1                    00097001
                                    871=*                                                              00098001
                      00008         872=ERR      EQU   X'08'                   PROGRAM INTERRUPT HAS   00099001
                                    873=*                                      OCCURED IN COMPILER     00100001
                      00004         874=TERM     EQU   X'04'                   LAST PHASE HAS BEEN ENTERED 00101001
                      00002         875=NOBUF    EQU   X'02'                   ERROR POOL IS IN WORKAREA 00102001
                                    876=*                                      NO SCE PROG BUFF 1      00103001
                      00001         877=NOGO     EQU   X'01'                   COMPILATION NOT POSSIBLE 00104001
                                    878=*                                      DO NOT START SCAN 1     00105001
                      00003         879=NOBUNOGO EQU   X'03'                   NOBUF AND NOGO          00106001
                                    880=*                                                              00107001
                                    881=*        SWITCHES IN COMPFLGS+2                                00108001
                                    882=*                                                              00109001
                      00080         883=PRT      EQU   X'80'                   SYSPRINT NOT AVAILABLE  00110001
                      00040         884=SPIC     EQU   X'40'                   SOURCE PROGRAM IN STORAGE 00111001
                      00020         885=NOPT     EQU   X'20'                   NO SUBSCRIPT OPTIMIZATION 00112001
                      00010         886=PRTNO    EQU   X'10'                   SYSPRINT NOT OPENED     00113001
                      00008         887=NOSC     EQU   X'08'                   SEMICOLON COUNTER NOT VALID 00114001
                                    888=*                                                              00115001
                      00004         889=NOTEST   EQU   X'04'                                           00116001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

                        000FB         890=TEST      EQU   X'FB'               EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                      891=*                                                                  00118001
                        00002         892=SET60     EQU   X'02'               60 CHARACTER SET IS TO BE USED   00119001
                                      893=*                                                                  00120001
                                      894=*         MISCELLANEOUS CONTROL INFORMATION                        00121001
                                      895=*                                                                  00122001
000084 0000B000                       896=SIZE      DC    F'45056'        AVAILABLE MAIN STORAGE - NOT USED    00123001
000088 00000000                       897=PICAADD   DC    A(0)            ADDR OF PICA OF THE INVOKER          00124001
00008C 00000000                       898=HDING     DC    F'0'            ADDR OF HEADING INFO OF THE INVOKER  00125001
000090 00000000                       899=ERET      DC    F'0'            RETURN ADDR FOR PROGRAM              00126001
                                      900=*                               AND I/O ERRORS                       00127001
000094 0000000C                       901=PAGECNT   DC    PL4'0'          PAGE COUNT                           00128001
000098 0000                           902=LINCNT    DC    H'0'            COUNTER OF LINES PER PAGE            00129001
00009A 0038                           903=MAXLINES  DC    H'56'           MAX NUMBER OF PRINT LINES PER PAGE   00130001
00009C 0000                           904=SEMCNT    DC    H'0'            SEMICOLON COUNTER                    00131001
00009E 0032                           905=PBN       DC    H'50'           HIGHEST PROGRAM BLOCK NUMBER         00132001
0000A0 0000                           906=KBN       DC    H'0'            HIGHEST CONSTANT POOL NUMBER         00133001
                        0001C         907=LATNR     EQU   28              NR OF LIBRARY STAND FUNCTIONS        00134001
                        0006C         908=LATBEG    EQU   4*(LATNR-1)                                          00135001
0000A2 006C                           909=LN        DC    AL2(LATBEG)     LAST USED DISPLACEMENT IN LAT        00136001
0000A4 00000000                       910=PRPT      DC    F'0'            PROGRAM POINTER                      00137001
0000A8 00000000                       911=SAVOUTA   DC    F'0'                                                 00138001
0000AC                                912=OUTAREA2  DS    F               SYSPUNCH SAVE AREA                   00139001
0000B0 40404040                       913=PIDENT    DC    CL4' '          PROGRAM IDENTIFICATION               00140001
0000B4 0000000C                       914=CARDCNT   DC    PL4'0'          OBJECT PROGRAM DECK SEQUENCE NUMBER  00141001
0000B8 00000000                       915=PRTRTADD  DC    A(0)            ADDR OF PRINT ROUTINE                00142001
                                      916=*                                                                  00143001
                                      917=*         ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE  00144001
                                      918=*                                                                  00145001
0000BC 00000278                       919=ERRPOOL   DC    A(PRELPOOL)     FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                       920=NEXTERR   DC    A(PRELPOOL)     NEXT FREE PLACE IN ERROR POOL        00147001
0000C4                                921=ENDPOOL   DS    F               LAST BYTE OF ERROR POOL-23           00148001
0000C8                                922=SRCE1ADD  DS    F               SOURCE PROGRAM BUFFER 1              00149001
0000CC                                923=SRCE1END  DS    F               ADDR OF LAST BYTE+1                  00150001
0000D0                                924=SULTSTRT  DS    F               ID OF LAST ITAB RECORD               00151001
                                      925=*                                                                  00152001
                                      926=*                                                                  00153001
                                      927=*         TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS              00154001
                                      928=*                                                                  00155001
0000D4                                929=INBLKS    DS    H               MAX BLKSIZE FOR SYSIN    - NOT USED  00156001
0000D6                                930=PRTBLKS   DS    H               MAX BLKSIZE SYSPRINT     - NOT USED  00157001
0000D8                                931=LINBLKS   DS    H               MAX BLKSIZE FOR SYSLIN   - NOT USED  00158001
0000DA                                932=PCHBLKS   DS    H               MAX BLKSIZE FOR SYSPUNCH - NOT USED  00159001
0000DC                                933=POOLS     DS    F               SIZE OF ERROR POOL                   00160001
0000E0                                934=SRCE1S    DS    F               SIZE OF SOURCE PROG BUFFERS 1 AND 2  00161001
                        000E0         935=SRCE3S    EQU   SRCE1S          SIZE OF SOURCE PROG BUFFERS 3 AND 4  00162001
0000E4                                936=ITAB10S   DS    F               SIZE OF ITAB FOR PHASE 10            00163001
0000E8                                937=ITAB20S   DS    F               SIZE OF ITAB FOR PHASE 20            00164001
0000EC                                938=ITAB30S   DS    F               SIZE OF ITAB FOR PHASE 30            00165001
0000F0                                939=CRIDTABS  DS    F               SIZE OF CRIDTAB FOR PHASE 30         00166001
0000F4                                940=SUTAB30S  DS    F               SIZE OF SUTAB BUFFER OF PHASE 30     00167001
0000F8                                941=LVTAB30S  DS    F               SIZE OF LVTAB BUFFER FOR PHASE 30    00168001
0000FC                                942=OPTABS    DS    F               SIZE OF OPTAB BUFFERS 1 AND 2        00169001
000100                                943=SUTAB40S  DS    F               SIZE OF SUTAB IN PHASE 40            00170001
000104                                944=LVTAB40S  DS    F               SIZE OF LVTAB IN PHASE 40            00171001
000108                                945=OOSTACKS  DS    F               SIZE OF OPERATOR/OPERAND STACK       00172001
                                      946=*                                                                  00173001
                                      947=*         AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF     00174001
                                      948=*         EACH NEW PAGE                                            00175001
                                      949=*                                                                  00176001
                        0010C         950=PAGEHEAD  EQU   *                                                  00177001
00010C 4040404040404040               951=PAGEHD1   DC    CL121' '             FIRST HEADLINE                  00178001
000185                  00185 0010C   952=          ORG   PAGEHD1                                            00179001
00010C F1                             953=PAGEHD1C  DC    C'1'                 ASA CNTL                        00180001
00010D 4040404040404040               954=          DC    CL10' '              SPACER                          00181001
000117 4040404040404040               955=PAGEHD1D  DC    CL100' '             PAGE TEXT HEADING               00182001
00017B                  0017B 0017D   956=          ORG   PAGEHD1+113                                        00183001
00017D D7C1C7C5                       957=PAGEHD1P  DC    CL4'PAGE'            PAGE                            00184001
000181 40404040                       958=PAGENUMB  DC    CL4' '               PAGE COUNTER                    00185001
000185                  00185 00185   959=          ORG                                                      00186001
                                      960=*                                                                  00187001
000185 4040404040404040               961=PAGEHD2   DC    CL121' '             SECOND HEADLINE                 00188001
0001FE                  001FE 00185   962=          ORG   PAGEHD2                                            00189001
000185 40                             963=PAGEHD2C  DC    C' '                 ASA CNTL                        00190001
000186 4040404040404040               964=          DC    CL10' '              SPACER                          00191001
000190 4040404040404040               965=PAGEHD2D  DC    CL100' '             PAGE TEXT HEADING               00192001
0001F4                  001F4 001FE   966=          ORG                                                      00193001
                                      967=*                                                                  00194001
0001FE 4040404040404040               968=PAGEHD3   DC    CL121' '             THIRD HEADLINE                  00195001
000277                  00277 001FE   969=          ORG   PAGEHD3                                            00196001
0001FE 40                             970=PAGEHD3C  DC    C' '                 ASA CNTL                        00197001
0001FF 4040404040404040               971=          DC    CL10' '              SPACER                          00198001
000209 4040404040404040               972=PAGEHD3D  DC    CL100' '             PAGE TEXT HEADING               00199001
00026D                  0026D 00277   973=          ORG                                                      00200001
                                      974=*                                                                  00201001
                                      975=*                                                                  00202001
                                      976=*         END OF STANDARD COMMON AREA                              00203001
                                      977=*                                                                  00204001
                        00277         978=STANDX    EQU   *                                                  00205001
                                      979=*                                                                  00206001
                                      980=*         THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL       00207001
                                      981=*         PHASES AND PARTLY OVERLAY EACH OTHER                     00208001
                                      982=*                                                                  00209001
                                      983=*                              NAME OR PURPOSE          NEEDED BY PHASES 00210001
                                      984=*                                                                  00211001
000277 00
```

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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                              X390 3.1.04  2012/08/17 13.13

000278                                985=          DC     0F'0'                                                00212001
000278 4040404040404040               986=PRELPOOL  DC     236C' ',20C'X' PRELIMINARY ERROR POOL     IEX10      00213001
000378                  00378 00416   987=          ORG    PRELPOOL+414                                         00214001
                                      988=*                               DCB FOR SYSIN              11         00215001
                                      989=SYSIN     DCB    DDNAME=SYSIN,                                       X00216001
                                         =                 DSORG=PS,                                           X00217001
                                         =                 MACRF=(GM),                                         X00218001
                                         =                 RECFM=FB,                                           X00219001
                                         =                 LRECL=80,                                           X00220001
                                         =                 BFTEK=S                                              00221001


                                      991+*                      DATA CONTROL BLOCK                           01-DCB
                                      992+*                                                                   01-DCB
000416 0000
000418                                993+SYSIN     DC     0F'0'              ORIGIN ON WORD BOUNDARY         01-DCB

                                      995+*                      DIRECT ACCESS DEVICE INTERFACE               01-DCB

000418 0000000000000000               997+          DC     BL16'0'             FDAD,DVTBL                     01-DCB
000428 00000000                       998+          DC     A(0)                KEYLE,DEVT,TRBAL               01-DCB

                                     1000+*                      COMMON ACCESS METHOD INTERFACE               01-DCB

00042C 00                            1002+          DC     AL1(0)             BUFNO                           01-DCB
00042D 000001                        1003+          DC     AL3(1)             BUFCB                           01-DCB
000430 0000                          1004+          DC     AL2(0)        BUFL                                 01-DCB
000432 4000                          1005+          DC     BL2'0100000000000000'        DSORG                 01-DCB
000434 00000001                      1006+          DC     A(1)                IOBAD                          01-DCB

                                     1008+*                      FOUNDATION EXTENSION                         01-DCB

000438 40                            1010+          DC     BL1'01000000'             BFTEK,BFLN,HIARCHY       01-DCB
000439 000001                        1011+          DC     AL3(1)             EODAD                           01-DCB
00043C 90                            1012+          DC     BL1'10010000'      RECFM                           01-DCB
00043D 000000                        1013+          DC     AL3(0)             EXLST                           01-DCB

                                     1015+*                      FOUNDATION BLOCK                             01-DCB

000440 E2E8E2C9D5404040              1017+          DC     CL8'SYSIN'         DDNAME                          01-DCB
000448 02                            1018+          DC     BL1'00000010'      OFLGS                           01-DCB
000449 00                            1019+          DC     BL1'00000000'                     IFLG             01-DCB
00044A 5000                          1020+          DC     BL2'0101000000000000'   MACR                       01-DCB

                                     1022+*                      BSAM-BPAM-QSAM INTERFACE                     01-DCB

00044C 00                            1024+          DC     BL1'00000000'                                 RER1 01-DCB
00044D 000001                        1025+          DC     AL3(1)             CHECK, GERR, PERR               01-DCB
000450 00000001                      1026+          DC     A(1)               SYNAD                           01-DCB
000454 0000                          1027+          DC     H'0'               CIND1, CIND2                    01-DCB
000456 0000                          1028+          DC     AL2(0)             BLKSIZE                         01-DCB
000458 00000000                      1029+          DC     F'0'               WCPO, WCPL, OFFSR, OFFSW        01-DCB
00045C 00000001                      1030+          DC     A(1)               IOBA                            01-DCB
000460 00                            1031+          DC     AL1(0)             NCP                             01-DCB
000461 000001                        1032+          DC     AL3(1)             EOBR, EOBAD                     01-DCB

                                     1034+*                           QSAM INTERFACE                          01-DCB

000464 00000001                      1036+          DC     A(1)                RECAD                          01-DCB
000468 0000                          1037+          DC     H'0'               QSWS                            01-DCB
00046A 0050                          1038+          DC     AL2(80)       LRECL                                01-DCB
00046C 00                            1039+          DC     BL1'00000000'      EROPT                           01-DCB
00046D 000001                        1040+          DC     AL3(1)             CNTRL                           01-DCB
000470 00000000                      1041+          DC     F'0'               PRECL                           01-DCB
000474 00000001                      1042+          DC     A(1)               EOB                             01-DCB
                                     1043=*                SYNAD=SYNAD   (ASSEMBLED IN IEX00001)                00222001
                                     1044=*                EODAD=EODADIN (INSERTED BY IEX11)                    00223001
000478                  00478 00278  1045=          ORG    PRELPOOL                                             00224001
000278                               1046=PBTAB2    DS     CL510          PROGR. BLOCK TABLE 2         20-50    00225001
000478                               1047=          DS     0F                                                   00226001
000478                               1048=PBTAB1    DS     CL255          PROGR. BLOCK TABLE 1         11-20    00227001
000577                  00577 00478  1049=          ORG    PBTAB1                                               00228001
000478                               1050=FSTAB     DS     CL255          FOR STATEMENT TABLE          30-40    00229001
                                     1051=*                               DCB FOR SYSUT1               11-30    00230001
                                     1052=SYSUT1    DCB    DDNAME=SYSUT1,                                      X00231001
                                         =                 DSORG=PS,                                           X00232001
                                         =                 MACRF=(R,W),                                        X00233001
                                         =                 RECFM=F                                              00234001


                                     1054+*                      DATA CONTROL BLOCK                           01-DCB
                                     1055+*                                                                   01-DCB
000577 00
000578                               1056+SYSUT1    DC     0F'0'              ORIGIN ON WORD BOUNDARY         01-DCB

                                     1058+*                      DIRECT ACCESS DEVICE INTERFACE               01-DCB

000578 0000000000000000              1060+          DC     BL16'0'             FDAD,DVTBL                     01-DCB
000588 00000000                      1061+          DC     A(0)                KEYLE,DEVT,TRBAL               01-DCB

                                     1063+*                      COMMON ACCESS METHOD INTERFACE               01-DCB

00058C 00                            1065+          DC     AL1(0)             BUFNO                           01-DCB
00058D 000001                        1066+          DC     AL3(1)             BUFCB                           01-DCB
000590 0000                          1067+          DC     AL2(0)        BUFL                                 01-DCB
000592 4000                          1068+          DC     BL2'0100000000000000'        DSORG                 01-DCB
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

000594 00000001                      1069+         DC    A(1)                    IOBAD                   01-DCB

                                     1071+*                         FOUNDATION EXTENSION                 01-DCB

000598 00                            1073+         DC    BL1'00000000'                 BFTEK,BFLN,HIARCHY 01-DCB
000599 000001                        1074+         DC    AL3(1)                  EODAD                   01-DCB
00059C 80                            1075+         DC    BL1'10000000'           RECFM                   01-DCB
00059D 000000                        1076+         DC    AL3(0)                  EXLST                   01-DCB

                                     1078+*                         FOUNDATION BLOCK                     01-DCB

0005A0 E2E8E2E4E3F14040              1080+         DC    CL8'SYSUT1'             DDNAME                  01-DCB
0005A8 02                            1081+         DC    BL1'00000010'           OFLGS                   01-DCB
0005A9 00                            1082+         DC    BL1'00000000'                     IFLG          01-DCB
0005AA 2020                          1083+         DC    BL2'0010000000100000'   MACR                    01-DCB

                                     1085+*                         BSAM-BPAM-QSAM INTERFACE             01-DCB

0005AC 00                            1087+         DC    BL1'00000000'                            RER1   01-DCB
0005AD 000001                        1088+         DC    AL3(1)                  CHECK, GERR, PERR       01-DCB
0005B0 00000001                      1089+         DC    A(1)                    SYNAD                   01-DCB
0005B4 0000                          1090+         DC    H'0'                    CIND1, CIND2            01-DCB
0005B6 0000                          1091+         DC    AL2(0)                  BLKSIZE                 01-DCB
0005B8 00000000                      1092+         DC    F'0'                    WCPO, WCPL, OFFSR, OFFSW 01-DCB
0005BC 00000001                      1093+         DC    A(1)                    IOBA                    01-DCB
0005C0 00                            1094+         DC    AL1(0)                  NCP                     01-DCB
0005C1 000001                        1095+         DC    AL3(1)                  EOBR, EOBAD             01-DCB

                                     1097+*                           BSAM-BPAM INTERFACE                01-DCB

0005C4 00000001                      1099+         DC    A(1)                    EOBW                    01-DCB
0005C8 0000                          1100+         DC    H'0'                    DIRCT                   01-DCB
0005CA 0000                          1101+         DC    AL2(0)         LRECL                            01-DCB
0005CC 00000001                      1102+         DC    A(1)                    CNTRL, NOTE, POINT      01-DCB
                                     1103=*              SYNAD=SYNAD,   (ASSEMBLED IN IEX00001)          00235001
                                     1104=*              EODAD=EODAD1                                    00236001
                                     1105=*                                                              00237001
0005D0                               1106=         DS    0F                                              00238001
0005D0                               1107=SPTAB    DS    CL255          SCOPE TABLE             11-30    00239001
0006D0                               1108=         DS    0F                                              00240001
                      006CD          1109=GPTAB    EQU   *-3            GROUP TABLE             11-30    00241001
0006D0                               1110=         DS    CL1510                                          00242001
                                     1111=*                                                              00243001
                                     1112=*        END OF SYMLIB PART OF COMMON WORK AREA                00244001
                                     1113=*                                                              00245001
                                     1114 *                                                              00118001
                                     1115 *                                                              00119001
                                     1116 *        CHARACTER EQUATES                                     00120001
                                     1117 *                                                              00121001
                                     1118          IEXCHAR                                               00122001
                                     1119+*                                                              01-IEXCH
                                     1120+*        CHARACTER A - Z                                       01-IEXCH
                                     1121+*                                                              01-IEXCH
                      00040          1122+XFA      EQU   X'40'                                           02-IEXCG
                      00041          1123+XFB      EQU   X'41'                                           02-IEXCG
                      00042          1124+XFC      EQU   X'42'                                           02-IEXCG
                      00043          1125+XFD      EQU   X'43'                                           02-IEXCG
                      00044          1126+XFE      EQU   X'44'                                           02-IEXCG
                      00045          1127+XFF      EQU   X'45'                                           02-IEXCG
                      00046          1128+XFG      EQU   X'46'                                           02-IEXCG
                      00047          1129+XFH      EQU   X'47'                                           02-IEXCG
                      00048          1130+XFI      EQU   X'48'                                           02-IEXCG
                      00049          1131+XFJ      EQU   X'49'                                           02-IEXCG
                      0004A          1132+XFK      EQU   X'4A'                                           02-IEXCG
                      0004B          1133+XFL      EQU   X'4B'                                           02-IEXCG
                      0004C          1134+XFM      EQU   X'4C'                                           02-IEXCG
                      0004D          1135+XFN      EQU   X'4D'                                           02-IEXCG
                      0004E          1136+XFO      EQU   X'4E'                                           02-IEXCG
                      0004F          1137+XFP      EQU   X'4F'                                           02-IEXCG
                      00050          1138+XFQ      EQU   X'50'                                           02-IEXCG
                      00051          1139+XFR      EQU   X'51'                                           02-IEXCG
                      00052          1140+XFS      EQU   X'52'                                           02-IEXCG
                      00053          1141+XFT      EQU   X'53'                                           02-IEXCG
                      00054          1142+XFU      EQU   X'54'                                           02-IEXCG
                      00055          1143+XFV      EQU   X'55'                                           02-IEXCG
                      00056          1144+XFW      EQU   X'56'                                           02-IEXCG
                      00057          1145+XFX      EQU   X'57'                                           02-IEXCG
                      00058          1146+XFY      EQU   X'58'                                           02-IEXCG
                      00059          1147+XFZ      EQU   X'59'                                           02-IEXCG
                                     1148+*                                                              01-IEXCH
                                     1149+*        NATIONAL CHARACTERS                                   01-IEXCH
                                     1150+*                                                              01-IEXCH
                      0005A          1151+XFDOLLAR EQU   X'5A'                                           02-IEXCG
                      0005B          1152+XFUNDER  EQU   X'5B'                                           02-IEXCG
                      0005C          1153+XFHASH   EQU   X'5C'                                           02-IEXCG
                      0005D          1154+XFAT     EQU   X'5D'                                           02-IEXCG
                                     1155+*                                                              01-IEXCH
                                     1156+*        NUMERIC 0 - 9                                         01-IEXCH
                                     1157+*                                                              01-IEXCH
                      00030          1158+XF0      EQU   X'30'                                           02-IEXCG
                      00031          1159+XF1      EQU   X'31'                                           02-IEXCG
                      00032          1160+XF2      EQU   X'32'                                           02-IEXCG
                      00033          1161+XF3      EQU   X'33'                                           02-IEXCG
                      00034          1162+XF4      EQU   X'34'                                           02-IEXCG
                      00035          1163+XF5      EQU   X'35'                                           02-IEXCG
                      00036          1164+XF6      EQU   X'36'                                           02-IEXCG
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                      00037        1165+XF7       EQU   X'37'                                                   02-IEXCG
                      00038        1166+XF8       EQU   X'38'                                                   02-IEXCG
                      00039        1167+XF9       EQU   X'39'                                                   02-IEXCG
                                   1168+*                                                                       01-IEXCH
                                   1169+*         SPECIAL CHARS                                                 01-IEXCH
                                   1170+*                                                                       01-IEXCH
                      00000        1171+XFPLUS    EQU   X'00'                                                   02-IEXCG
                      00001        1172+XFMINUS   EQU   X'01'                                                   02-IEXCG
                      00002        1173+XFASTER   EQU   X'02'                                                   02-IEXCG
                      00003        1174+XFSLASH   EQU   X'03'                                                   02-IEXCG
                      00006        1175+XFLBRAC   EQU   X'06'                                                   02-IEXCG
                      00007        1176+XFCOLON   EQU   X'07'                                                   02-IEXCG
                      00008        1177+XFLSQBR   EQU   X'08'                                                   02-IEXCG
                      0000B        1178+XFSCOLON  EQU   X'0B'                                                   02-IEXCG
                      00010        1179+XFEQUAL   EQU   X'10'                                                   02-IEXCG
                      00011        1180+XFLT      EQU   X'11'                                                   02-IEXCG
                      00012        1181+XFGT      EQU   X'12'                                                   02-IEXCG
                      00020        1182+XFNOT     EQU   X'20'                                                   02-IEXCG
                      00022        1183+XFOR      EQU   X'22'                                                   02-IEXCG
                      00023        1184+XFAMPER   EQU   X'23'                                                   02-IEXCG
                      00025        1185+XFCOMMA   EQU   X'25'                                                   02-IEXCG
                      00026        1186+XFRBRAC   EQU   X'26'                                                   02-IEXCG
                      00028        1187+XFRSQBR   EQU   X'28'                                                   02-IEXCG
                      0002B        1188+XFBLANK   EQU   X'2B'                                                   02-IEXCG
                      0002D        1189+XFPERIOD  EQU   X'2D'                                                   02-IEXCG
                      0002E        1190+XFQUOTE   EQU   X'2E'                                                   02-IEXCG
                                   1191+*                                                                       01-IEXCH
                      0000C        1192+XFDQUOTE  EQU   X'0C'                                                   02-IEXCG
                                   1193+*                                                                       01-IEXCH
                      0002C        1194+XFEXCLM   EQU   X'2C'                                                   02-IEXCG
                      0002C        1195+XFPERCT   EQU   X'2C'                                                   02-IEXCG
                                   1196+*                                                                       01-IEXCH
                                   1197+*         INTERNAL CONTROL CODES                                        01-IEXCH
                                   1198+*                                                                       01-IEXCH
                      00005        1199+XFPOWER     EQU   X'05'                                                 01-IEXCH
                      00016        1200+XFASSIGN    EQU   X'16'                                                 01-IEXCH
                      00017        1201+XFGOTO      EQU   X'17'                                                 01-IEXCH
                      00018        1202+XFFOR       EQU   X'18'                                                 01-IEXCH
                      0001D        1203+XFIF        EQU   X'1D'                                                 01-IEXCH
                      00027        1204+XFLABEL     EQU   X'27'                                                 01-IEXCH
                      00029        1205+XFDELTA     EQU   X'29'                                                 01-IEXCH
                      0002C        1206+XFEND       EQU   X'2C'                                                 01-IEXCH
                      0002F        1207+XFZETA      EQU   X'2F'                                                 01-IEXCH
                      0003E        1208+XFDECPT     EQU   X'3E'                                                 01-IEXCH
                                   1209 *                                                                       00123001
                                   1210 *         REGISTER EQUATES                                              00124001
                                   1211 *                                                                       00125001
                                   1212           IEZREGS                                                       00126001
                      00000        1213+R0        EQU   0                                                       01-IEZRE
                      00001        1214+R1        EQU   1                                                       01-IEZRE
                      00002        1215+R2        EQU   2                                                       01-IEZRE
                      00003        1216+R3        EQU   3                                                       01-IEZRE
                      00004        1217+R4        EQU   4                                                       01-IEZRE
                      00005        1218+R5        EQU   5                                                       01-IEZRE
                      00006        1219+R6        EQU   6                                                       01-IEZRE
                      00007        1220+R7        EQU   7                                                       01-IEZRE
                      00008        1221+R8        EQU   8                                                       01-IEZRE
                      00009        1222+R9        EQU   9                                                       01-IEZRE
                      0000A        1223+R10       EQU   10                                                      01-IEZRE
                      0000B        1224+R11       EQU   11                                                      01-IEZRE
                      0000C        1225+R12       EQU   12                                                      01-IEZRE
                      0000D        1226+R13       EQU   13                                                      01-IEZRE
                      0000E        1227+R14       EQU   14                                                      01-IEZRE
                      0000F        1228+R15       EQU   15                                                      01-IEZRE
                                   1229 *                                                                       00127001
                                   1230           END                                                           00128001
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Symbol    Length    Value     Id    Type Asm  Program   Defn  References                  X390 3.1.04  2012/08/17 13.13

=A(IEX60000)
                4 00000058 00000001  A A                123  100
AWADDTAB        4 0000057C 00000004  F F                478  178   434
AWEMPOOL        4 00000578 00000004  F F                477  148M  169
BLANKS          5 00000594 00000004  C C                486  219
COMPFLGS        4 00000080 FFFFFFFF  X X                837  152   199M  204M  205M  208M  291   406   423   428   447M
COMPMODE        1 00000080           U                  841  205
COT01           4 000000B6 00000004  I                  169  158B  401B  455B
COT03A          4 00000110 00000004  I                  202  198B
COT03B          4 00000124 00000004  I                  208  203B
COT04           2 00000128 00000004  I                  212  200B  206B
COT05           4 00000186 00000004  I                  240  232B  278B
COT06           4 0000018E 00000004  I                  247  240B
COT07           4 000001F0 00000004  I                  282  254B
COT08           4 000001E0 00000004  I                  275  287B  316B
COT09           4 000001E8 00000004  I                  277  264B  268B  285B
COT10           4 00000206 00000004  I                  291  256B
COT11           2 00000264 00000004  I                  318  311B
COT12           4 0000028E 00000004  I                  335  241B
COT17           4 000002B8 00000004  I                  351  349B
COT18           4 000003A6 00000004  I                  425  153B
COT18A          4 000003AE 00000004  I                  428  424B
COT19           4 000002D8 00000004  I                  361  359B
COT20           4 000002BC 00000004  I                  352  364B
COT21           2 00000356 00000004  I                  396  354B
COT24           4 000002F0 00000004  I                  373  382M
COT25           4 000002E6 00000004  I                  368  336B
COT26           4 00000152 00000004  I                  223  218B
COT27           4 00000346 00000004  I                  388  347B  357B  437B  440B
COT28           4 0000037C 00000004  I                  407  156B
COT29           2 00000386 00000004  H H                412  408B  448B
COT30           4 000001D4 00000004  I                  272  252B
COT31           4 00000164 00000004  I                  230  221B
COT32           4 00000216 00000004  I                  296  292B
COT32A          4 0000021A 00000004  I                  297  294B
COT32B          4 00000240 00000004  I                  307  303B
COT33           4 0000026E 00000004  I                  324  258B
COT34           6 00000284 00000004  I                  330  327M
COT35           4 000001E4 00000004  I                  276  320B  331B
COT36           4 000000D0 00000004  I                  177  174B
COT37           4 000001BA 00000004  I                  262  251B
COT38           4 000001C4 00000004  I                  265  267B
CPI            20 00000564 00000004  C C                473  438
ERET            4 00000090 FFFFFFFF  F F                899  150M  403M
ERR             1 00000008           U                  872  428
ERRINFO         4 0000004C 00000001  V V                118  102
ERRPOOL         4 000000BC FFFFFFFF  A A                919  154   404
EXMVC           6 0000033C 00000004  I                  382  369X
HEADD1         11 0000053E 00000004  C C                470  157   164
HEADD2         27 00000549 00000004  C C                471  165
IEX31M00        1 00000000 00000002  T                  118  118
IEX31M01        1 00000000 00000003  T                  119  119
IEX31000        1 00000000 00000001  J                   90   98U
IEX60000        1 00000060 00000004  J                  130  123   132U
IHB0004A        2 0000033A 00000004  H H                379  373B
LAST            4 000003FE 00000004  I                  452  426B  429B
LATBEG          1 0000006C           U                  908  909
LATNR           1 0000001C           U                  907  908
LINCNT          2 00000098 FFFFFFFF  H H                902  159M
MODNUMB         2 00000580 00000004  H H                479  175   431
NEXTERR         4 000000C0 FFFFFFFF  A A                920  155   399   405M  441   452
NSRCE           1 00000080           U                  859  447
PAGEHD1       121 0000010C FFFFFFFF  C C                951  952   956
PAGEHD1C        1 0000010C FFFFFFFF  C C                953  160M  161M
PAGEHD1D      100 00000117 FFFFFFFF  C C                955  162   163   164M
PAGEHD2       121 00000185 FFFFFFFF  C C                961  962
PAGEHD2D      100 00000190 FFFFFFFF  C C                965  162M  165M
PAGEHD3       121 000001FE FFFFFFFF  C C                968  969
PAGEHD3D      100 00000209 FFFFFFFF  C C                972  163M
PAGEHEAD        1 0000010C FFFFFFFF  U                  950  157
PBTAB1        255 00000478 FFFFFFFF  C C               1048 1049
PRELPOOL        1 00000278 FFFFFFFF  C C                986  919   920   987  1045
PRT             1 00000080           U                  883  152   423
PRTNO           1 00000010           U                  886  152
PRTRTADD        4 000000B8 FFFFFFFF  A A                915  389
R1              1 00000001           U                 1214  102M  148   438   439   444   445   461   462
R10             1 0000000A           U                 1223  172M  173   175M  176   187M  191   195M  196   197   202
                                                             212M  213M  214   223M  224   233M  237   248M  272M  273M
                                                             283M  284   286M  298M  299M  300M  301   306M  307M  308M
                                                             310   312M  314   315M  319   328M  346M  352M  402M  403
                                                             404M  405   431M  432   442M  443   453M  454   460   461
                                                             462
R11             1 0000000B           U                 1224  234M  235M  236M  237M  238   239   249M  274M  275   276
                                                             282M  284M  293M  296M  312   313M  314M  318M  325M  326M
                                                             327   329   340M  342M  344M  348M  350   353M  356M  358M
                                                             360   368M  369
R12             1 0000000C           U                 1225  188M  189M  240M
R13             1 0000000D           U                 1226  147U
R14             1 0000000E           U                 1227  101M  151   230M  239M  263   265   266M  276M  319   330
                                                             340   388   390M  391M  407M  409B  460
R15             1 0000000F           U                 1228   94    98U  151   347M  357M  361M  362   388   389M  390B
                                                             391M  392B  407M  437M  440M
R2              1 00000002           U                 1215  100M  103B  132U
R3              1 00000003           U                 1216  262M  263M  267M  297M  304M  308
R4              1 00000004           U                 1217  169M
R5              1 00000005           U                 1218  154M  155   171   213   217   220   223   282   286   300
                                                             325   328   397   398M  400   452M  454M
```

```
Symbol     Length    Value     Id     Type Asm  Program    Defn  References              X390 3.1.04  2012/08/17 13.13

R6              1 00000006             U                   1219  184M  250   253   255   257   272   274   277M  298
R7              1 00000007             U                   1220  170M  171M  173   176M  177M  179M  180M  184   186   195
                                                                 231   233   235   236   273   430M  432M  433M  435M  436M
                                                                 439
R9              1 00000009             U                   1222  149M  150   178M  179   185M  186M  187   188   190M  191M
                                                                 195   247M  299   309M  310   324M  326   341M  342   343M
                                                                 344   345M  350M  351   352   355M  356   360M  362M  363
                                                                 396M  397M  398   399M  400   434M  435   441M  443M  444
SERR            1 00000010             U                    853  204
SET60           1 00000002             U                    892  291
SRCE1S          4 000000E0 FFFFFFFF  F F                    934  935
SUSCR           2 00000034 00000001  H H                    110  101
SVAR1           4 0000058C 00000004  F F                    485  151M  407
SVAR2           4 00000584 00000004  F F                    484  388M  391
SWTO            1 00000582 00000004  X X                    483  335   425M
TERR            1 00000008             U                    854  208   406
TRINTEXT        8 00000599 00000004  C C                    492  330
WAREA          20 00000430 00000004  C C                    465  196M  215M  216M  219M  225M  226M  230   262   341   346
                                                                 382
WDEC            8 00000420 00000004  D D                    464  214M  215   224M  225   301M  302   305M  306
WDIRET1         4 0000039E 00000004  I                      423  149
WDIRET2         4 000003F6 00000004  I                      447  384B  402
WERR            1 00000020             U                    852  199
WMOVE1          6 0000040C 00000004  I                      460  238X  275X  329X
WMOVE3          6 00000412 00000004  I                      461  351X
WMOVE4          6 00000418 00000004  I                      462  363X
WORDSEBC        1 000005B4 00000004  U                      627  296
WORDSISO        1 0000069C 00000004  U                      698  293
WORKAREA        1 00000000 FFFFFFFF  J                      771  147U
WSYMBSRC        1 000005F8 00000004  X X                    509  304
WSYMBSTK        1 00000656 00000004  X X                    567  297
```

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)           X390 3.1.04  2012/08/17 13.13

    0(0)  (no references identified)
    1(1)   102M  148   373M  438   439   444   445   461   462
    2(2)   100M  103B  132U
    3(3)   262M  263M  267M  297M  304M  308
    4(4)   169M
    5(5)   154M  155   171   213N  217   220   223   282   286   300   325   328   397   398M  400   452M  454M
    6(6)   184M  250   253   255   257   272   274   277M  298
    7(7)   170M  171M  173   176M  177M  179M  180M  184   186   195   231   233   235   236   273   430M  432M  433M
           435M  436M  439
    8(8)  (no references identified)
    9(9)   149M  150   178M  179   185M  186M  187   188   190M  191M  195N  247M  299   309M  310   324M  326   341M
           342   343M  344   345M  350M  351   352N  355M  356   360M  362M  363   396M  397M  398   399M  400   434M
           435   441M  443M  444
   10(A)   172M  173   175M  176   187M  191   195M  196   197   202   212M  213M  214   223M  224   233M  237   248M
           272M  273M  273N  283M  284   286M  298M  299M  300M  300N  301   306M  307M  308M  308N  310   312M  312N
           314   315M  319   328M  346M  352M  402M  403   404M  405   431M  432   442M  443   453M  454   460   461
           462
   11(B)   234M  235M  236M  237M  238   239N  249M  274M  275   276N  282M  284M  293M  296M  312   313M  314M  318M
           325M  326M  327   329   340M  342M  344M  348M  350   353M  356M  358M  360   368M  369
   12(C)   188M  189M  240M
   13(D)   147U
   14(E)   101M  151   230M  239M  263   265   266M  276M  319   330   340   388   390M  391M  407M  409B  460
   15(F)    94B   98U  112M  151   347M  357M  361M  362   388   389M  390B  391M  392B  407M  414M  437M  440M
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| WORKAREA | 00000CB6 | FFFFFFFF | 771 | | PRIMARY INPUT |

```
Con Source      Members                                                                X390 3.1.04  2012/08/17 13.13

  1 SYS1.MACLIB
                DCB      IEZREGS  IHBINNRB IHB01    WTO      XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
                IEX60000
  4 SYSD.ALGOLF.MACLIB
                IEXCGEN  IEXCHAR  IEXENTRY WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

```
 Stmt  Level  Action  Type          Id       Address   Range     Reg  Max    Last  Text      X390 3.1.04  2012/08/17 13.13

   98         USING   Ordinary   00000001  00000000  00001000  15 00058    112  IEX31000,R15
  132         USING   Ordinary   00000004  00000060  00001000   2 0063C    455  IEX60000,R2
  147         USING   Ordinary   FFFFFFFF  00000000  00001000  13 00209    452  WORKAREA,R13
```

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X31    STEPNAME: IEX31    PROCSTEP: X390

Primary input:  lines      1 to     128 of SYSD.ALGOLF.ASM(IEX31)

SYSLIB library records read: 3887

SYSUT1 work file size: 119681 bytes

SYSUT2 work file size: 246603 bytes

SYSUT3 work file size: 10240 bytes

SYSLIN file records written: 44

TXA000I Return code 0, elapsed time 4.48 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX31000 | 00005C | 4 |
| IEX60000 | 000884 | 4 |

# IEX31M

LEVEL

V2.M01

 X390 3.1.04 2012/08/17 13.13

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX31M)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131318.RA000.T131M.OBJECT
SYSPRINT    JES2.JOB09276.SO0102
SYSUT1      SYS12230.T131318.RA000.T131M.SYSUT1
SYSUT2      SYS12230.T131318.RA000.T131M.SYSUT2
SYSUT3      SYS12230.T131318.RA000.T131M.SYSUT3
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.13

                                      2 *                                                                       00003001
                                      3 *        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                    00004001
                                      4 *                                                                       00005001
                                      5 *        FUNCTION/OPERATION -                                           00006001
                                      6 *        THIS MODULE CONTAINS MESSAGE TEXTS FOR ALL ERRORS THAT         00007001
                                      7 *        MAY BE DETECTED BY IEX00 AND IEX30, AND THE CORRESPONDING      00008001
                                      8 *        ADDRESS TABLE                                                  00009001
                                      9 *                                                                       00010001
                                     10 *        ENTRY POINT - N/A                                              00011001
                                     11 *                                                                       00012001
                                     12 *        INPUT - N/A                                                    00013001
                                     13 *                                                                       00014001
                                     14 *        OUTPUT - N/A                                                   00015001
                                     15 *                                                                       00016001
                                     16 *        EXTERNAL ROUTINES - N/A                                        00017001
                                     17 *                                                                       00018001
                                     18 *        EXITS - NORMAL - N/A                                           00019001
                                     19 *                                                                       00020001
                                     20 *        EXITS - ERROR - N/A                                            00021001
                                     21 *                                                                       00022001
                                     22 *        TABLES/WORKAREAS - N/A                                         00023001
                                     23 *                                                                       00024001
                                     24 *        ATTRIBUTES - N/A                                               00025001
                                     25 *                                                                       00026001
                                     26 *        NOTES -                                                        00027001
                                     27 *        AT SYSTEM GENERATION THIS MODULE WILL BE LINKED                00028001
                                     28 *        TOGETHER WITH THE MODULE IEX31 TO FORM THE MODULE IEX31        00029001
                                     29 *                                                                       00030001
000000                00000 003FC    30 IEX31M00 CSECT                                                          00031001
                                     31 *                                                                       00032001
                                     32          ENTRY IEX31M01                                                 00033001
                                     33 *                                                                       00034001
                                     34 *        ERROR MESSAGE POOL 2                                           00035001
                                     35 *                                                                       00036001
                      00000          36 WEMPOOL2 EQU   *                                                        00037001
                                     37 *                                                                       00038001
000000 3E0300160C240023              38 W080     DC    X'3E0300160C240023001B23'                                00039001
00000B E2D6D7C5D9C1D5C4              39          DC    CL52'SOPERAND BEGINNING WITH  IS SYNTACTICALLY INCORRECTX00040001
                                                       .'                                                       00041001
                                     40 *                                                                       00042001
00003F 2403000A0C240017              41 W081     DC    X'2403000A0C240017000D17'                                00043001
00004A E2C9C4C5D5E3C9C6              42          DC    CL26'SIDENTIFIER  NOT DECLARED.'                         00044001
                                     43 *                                                                       00045001
000064 3603001C0C240029              44 W082     DC    X'3603001C0C240029000D29'                                00046001
00006F E2D9C5C1D340C3D6              45          DC    CL44'SREAL CONSTANT BEGINNING WITH  OUT OF RANGE.'       00047001
                                     46 *                                                                       00048001
00009B 5A05001612240029              47 W083     DC    X'5A05001612240029001E29F00000001149'                    00049001
0000AC E6C9D5E3C5C7C5D9              48          DC    CL74'WINTEGER BEGINNING WITH  OUT OF RANGE. INTEGER CONSX00050001
                                                       TANT CONVERTED TO REAL.'                                 00051001
                                     49 *                                                                       00052001
0000F6 750500291224003C              50 W084     DC    X'750500291224003C00083CF00000003045'                    00053001
000107 E6D7D9C5C3C9E2C9              51          DC    CL101'WPRECISION OF REAL CONSTANT BEGINNING WITH  EXCEEDX00054001
                                                       S INTERNALLY HANDLED PRECISION. CONSTANT TRUNCATED.'     00055001
                                     52 *                                                                       00056001
00016C 210300140C240021              53 W085     DC    X'210300140C240021000021'                                00057001
000177 E2C9D3D3C5C7C1D3              54          DC    CL23'SILLEGAL USE OF LABEL .'                            00058001
                                     55 *                                                                       00059001
00018E 1500                          56 W086     DC    X'1500'                                                  00060001
000190 E2E3D6D640D4C1D5              57          DC    CL20'STOO MANY CONSTANTS.'                               00061001
                                     58 *                                                                       00062001
0001A4 3A00                          59 W087     DC    X'3A00'                                                  00063001
0001A6 E6C6E4D3D340D6D7              60          DC    CL57'WFULL OPTIMIZATION NOT POSSIBLE DUE TO INTERNAL OVEX00064001
                                                       RFLOW.'                                                  00065001
                                     61 *                                                                       00066001
0001DF 8805000A1224001C              62 W088     DC    X'8805000A1224001C002C1DF00000003D4B'                    00067001
0001F0 E6C9C4C5D5E3C9C6              63          DC    CL120'WIDENTIFIER  IN BOUND EXPRESSION DECLARED IN SAME X00068001
                                                       PROGRAM BLOCK AS ARRAY. DECLARATION IN SURROUNDING BLOCKX00069001
                                                        SEARCHED FOR.'                                          00070001
                                     64 *                                                                       00071001
000268 450300040C240011              65 W089     DC    X'450300040C240011003411'                                00072001
000273 E6C7D6E3D64040C9              66          DC    CL59'WGOTO  INVALID OUTSIDE FOR STATEMENT CONTAINING THIX00073001
                                                       S LABEL.'                                                00074001
                                     67 *                                                                       00075001
                                     68 *        DIRECTORY MESSAGES                                             00076001
                                     69 *                                                                       00077001
                      002AE          70 W090     EQU   *                                                        00078001
                      002AE          71 W209     EQU   *                                                        00079001
0002AE 460400360FF00000              72          DC    X'460400360FF00000840046000046'                          00080001
0002BC E3C3D6D4D7C9D3C1              73          DC    CL57'TCOMPILATION UNSUCCESSFUL DUE TO PROGRAM INTERRUPT.X00081001
                                                        PSW .'                                                  00082001
                                     74 *                                                                       00083001
                      002F5          75 W091     EQU   *                                                        00084001
                      002F5          76 W210     EQU   *                                                        00085001
0002F5 300300270C840030              77          DC    X'300300270C840030000030'                                00086001
000300 E3E4D5D9C5C3D6E5              78          DC    CL38'TUNRECOVERABLE I/O ERROR ON DATA SET .'             00087001
                                     79 *                                                                       00088001
                      00326          80 W092     EQU   *                                                        00089001
                      00326          81 W211     EQU   *                                                        00090001
000326 D7D9D6C7D9C1D440              82          DC    CL56'PROGRAM INTERRUPT IN ERROR MESSAGE EDITING ROUTINE.X00091001
                                                        PSW '                                                   00092001
                                     83 *                                                                       00093001
                      0035E          84 W093     EQU   *                                                        00094001
00035E 1200                          85 W212     DC    X'1200'                                                  00095001
000360 E3E3D6D640D4C1D5              86          DC    CL17'TTOO MANY ERRORS.'                                  00096001
                                     87 *                                                                       00097001
                      00371          88 W094     EQU   *                                                        00098001
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

000371 2800                          89 W213     DC    X'2800'                                                  00099001
000373 E3C9D5E3C5D9D5C1              90          DC    CL39'TINTERNAL OVERFLOW OF IDENTIFIER TABEL.'            00100001
                                     91 *                                                                       00101001
                      0039A          92 W095     EQU   *                                                        00102001
                      0039A          93 W215     EQU   *                                                        00103001
00039A 1A00                          94          DC    X'1A00'                                                  00104001
00039C E3E2D6E4D9C3C540              95          DC    CL25'TSOURCE PROGRAM TOO LONG.'                          00105001
                                     96 *                                                                       00106001
                                     97 *        ADDR TABLE FOR WEMPOOL2                                        00107001
                                     98 *                                                                       00108001
0003B5 000000
0003B8                               99          DC    0F'0'                                                    00109001
                      00278         100 IEX31M01 EQU   *-320                                                    00110001
0003B8 00000000                     101          DC    A(W080)                                                  00111001
0003BC 0000003F                     102          DC    A(W081)                                                  00112001
0003C0 00000064                     103          DC    A(W082)                                                  00113001
0003C4 0000009B                     104          DC    A(W083)                                                  00114001
0003C8 000000F6                     105          DC    A(W084)                                                  00115001
0003CC 0000016C                     106          DC    A(W085)                                                  00116001
0003D0 0000018E                     107          DC    A(W086)                                                  00117001
0003D4 000001A4                     108          DC    A(W087)                                                  00118001
0003D8 000001DF                     109          DC    A(W088)                                                  00119001
0003DC 00000268                     110          DC    A(W089)                                                  00120001
0003E0 000002AE                     111          DC    A(W090)                                                  00121001
0003E4 000002F5                     112          DC    A(W091)                                                  00122001
0003E8 00000326                     113          DC    A(W092)                                                  00123001
0003EC 0000035E                     114          DC    A(W093)                                                  00124001
0003F0 00000371                     115          DC    A(W094)                                                  00125001
0003F4 00000000                     116          DC    A(0)                                                     00126001
0003F8 0000039A                     117          DC    A(W095)                                                  00127001
                                    118 *                                                                       00128001
                                    119          END                                                            00129001
```

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| IEX31M01 | 1 | 00000278 | 00000001 | U | | | 100 | 32 |
| W080 | 11 | 00000000 | 00000001 | X | X | | 38 | 101 |
| W081 | 11 | 0000003F | 00000001 | X | X | | 41 | 102 |
| W082 | 11 | 00000064 | 00000001 | X | X | | 44 | 103 |
| W083 | 17 | 0000009B | 00000001 | X | X | | 47 | 104 |
| W084 | 17 | 000000F6 | 00000001 | X | X | | 50 | 105 |
| W085 | 11 | 0000016C | 00000001 | X | X | | 53 | 106 |
| W086 | 2 | 0000018E | 00000001 | X | X | | 56 | 107 |
| W087 | 2 | 000001A4 | 00000001 | X | X | | 59 | 108 |
| W088 | 17 | 000001DF | 00000001 | X | X | | 62 | 109 |
| W089 | 11 | 00000268 | 00000001 | X | X | | 65 | 110 |
| W090 | 1 | 000002AE | 00000001 | U | | | 70 | 111 |
| W091 | 1 | 000002F5 | 00000001 | U | | | 75 | 112 |
| W092 | 1 | 00000326 | 00000001 | U | | | 80 | 113 |
| W093 | 1 | 0000035E | 00000001 | U | | | 84 | 114 |
| W094 | 1 | 00000371 | 00000001 | U | | | 88 | 115 |
| W095 | 1 | 0000039A | 00000001 | U | | | 92 | 117 |

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T131M    STEPNAME: IEX31M    PROCSTEP: X390

Primary input:  lines      1 to     129 of SYSD.ALGOLF.ASM(IEX31M)

SYSLIB library records read: 0

SYSUT1 work file size: 12448 bytes

SYSUT3 work file size: 10320 bytes

SYSLIN file records written: 23

TXA000I Return code 0, elapsed time 0.08 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

```
Csect    Rel Addr(hex) Length(dec)
IEX31M00    0003FC          4
```

# IEX40

LEVEL

V2.M01

 X390 3.1.04 2012/08/17 13.13

```
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Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
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  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
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SYSIN       SYSD.ALGOLF.ASM(IEX40)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131319.RA000.T1X40.OBJECT
SYSPRINT    JES2.JOB09277.SO0102
SYSUT1      SYS12230.T131319.RA000.T1X40.SYSUT1
SYSUT2      SYS12230.T131319.RA000.T1X40.SYSUT2
SYSUT3      SYS12230.T131319.RA000.T1X40.SYSUT3
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                      2 *                                                                     00003001
                                      3 *        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                  00004001
                                      4 *                                                                     00005001
                                      5 *        FUNCTION/OPERATION -                                         00006001
                                      6 *        IEX40000 BUILDS THE OPTIMIZATION TABLE (OPTAB) USING         00007001
                                      7 *        THE SUBSCRIPT TABLE, THE LEFT VARIABLE TABLE AND THE FOR     00008001
                                      8 *        STATEMENT TABLE. AN OPTAB ENTRY CORRESPOND TO AN             00009001
                                      9 *        OPTIMIZABLE SUBSCRIPT EXPRESSION INSIDE A FOR STATEMENT.     00010001
                                     10 *        IF NO OPTAB IS PRODUCED THIS IS INDICATED IN THE             00011001
                                     11 *        COMPILER STATUS BYTES IN COMPFLGS                            00012001
                                     12 *        IEX40001 IS THE INITIALIZATION OF NEXT MODULE, IEX50,        00013001
                                     13 *        AND PERFORMS THE FOLLOWING FUNCTIONS -                       00014001
                                     14 *        CALCULATION AND RESERVATION OF STORAGE AREAS NEEDED          00015001
                                     15 *        LOADING REGISTERS WITH START ADDRESSES                       00016001
                                     16 *        READING THE FIRST RECORDS OF SOURCE PROGRAM AND OPTAB        00017001
                                     17 *        SETTING INITIAL VALUES IN THE PRIVATE PART OF COMMON         00018001
                                     18 *        WORKAREA                                                     00019001
                                     19 *                                                                     00020001
                                     20 *        ENTRY POINT - IEX40000                                       00021001
                                     21 *                                                                     00022001
                                     22 *        INPUT -                                                      00023001
                                     23 *        IEX40000 READS TWO TABLES CONSTRUCTED IN IEX30               00024001
                                     24 *        FROM SYSUT3. THE SUBSCRIPT TABLE (SUTAB) CONTAINS            00025001
                                     25 *        ENTRIES FOR LINEAR SUBSCRIPT EXPRESSIONS IN FOR              00026001
                                     26 *        STATEMENTS THAT ARE OPTIMIZABLE IN REGARD TO                 00027001
                                     27 *        SUBSCRIPTS.                                                  00028001
                                     28 *        THE LEFT VARIABLE TABLE (LVTAB) CONTAINS ENTRIES FOR         00029001
                                     29 *        INTEGER LEFT VARIABLES IN FOR STATEMENTS THAT ARE            00030001
                                     30 *        OPTIMIZABLE IN REGARD TO SUBSCRIPTS.                         00031001
                                     31 *        IEX40001 READS THE FIRST TWO RECORDS OF THE                  00032001
                                     32 *        SOURCE PROGRAM FROM SYSUT2 INTO TWO SOURCE BUFFERS.          00033001
                                     33 *        THE FIRST TWO RECORDS OF OPTAB ARE READ IN FROM SYSUT3       00034001
                                     34 *        TO TWO OPTAB BUFFERS                                         00035001
                                     35 *                                                                     00036001
                                     36 *        OUTPUT -                                                     00037001
                                     37 *        THE OPTIMIZATION TABLE (UPTAB)IS WRITTEN OUT ON SYSUT3.      00038001
                                     38 *        OPTAB CONTAINS ONE ENTRY FOR EVERY OPTIMIZABLE               00039001
                                     39 *        SUBSCRIPT EXPRESSION IN A FOR STATEMENT                      00040001
                                     40 *                                                                     00041001
                                     41 *        EXTERNAL ROUTINES -                                          00042001
                                     42 *        THE INTERRUPT ROUTINES OF IEX00 ARE USED                     00043001
                                     43 *                                                                     00044001
                                     44 *        EXIT - NORMAL - CONTROL IS GIVEN TO THE NEXT LOAD            00045001
                                     45 *        MODULE BY MEANS OF XCTL EP=IEX50                             00046001
                                     46 *                                                                     00047001
                                     47 *        EXITS - ERROR -                                              00048001
                                     48 *        INPUT/OUTPUT ERRORS AND PROGRAM INTERRUPTS ARE HANDLED       00049001
                                     49 *        BY A DIRECTORY ROUTINE WHICH RETURNS CONTROL TO THE          00050001
                                     50 *        INTERRUPTED MODULE. IF THE ERROR OCCURED BEFORE THE          00051001
                                     51 *        GETMAIN IN IEX40001 CONTROL IS GIVEN TO THE TERMINATING      00052001
                                     52 *        MODULE BY MEANS OF XCTL EP=IEX51ER2                          00053001
                                     53 *        IF THE ERROR OCCURED AFTER THE GETMAIN CONTROL IS GIVEN      00054001
                                     54 *        TO THE TERMINATING MODULE BY MEANS OF                        00055001
                                     55 *        XCTL EP=IEX51ER1                                             00056001
                                     56 *                                                                     00057001
                                     57 *        TABLES/WORKAREAS -                                           00058001
                                     58 *        THE FOR STATEMENT TABLE (FSTAB) CONSTRUCTED IN IEX30         00059001
                                     59 *        AND POSSIBLY REVISED BY IEX40000 CONTAINS                    00060001
                                     60 *        CLASSIFICATIONS OF THE FOR STATEMENTS                        00061001
                                     61 *                                                                     00062001
                                     62 *        ATTRIBUTES - NONE                                            00063001
                                     63 *                                                                     00064001
                                     64 *        NOTES -                                                      00065001
                                     65 *        THE OPERATION OF THIS MODULE DOES NOT DEPEND UPON ANY        00066001
                                     66 *        SPECIAL REPRESENTATION OF THE EXTERNAL CHARACTER SET.        00067001
                                     67 *        THIS MODULE IS ONLY INTENDED TO BE EXECUTED IN               00068001
                                     68 *        CONNECTION WITH THE OTHER MODULES OF THE ALGOL COMPILER.     00069001
                                     69 *        IN PARTICULAR IT REQUIRES THE COMMON WORKAREA                00070001
                                     70 *                                                                     00071001
                                     71 *                                                                     00072001
000000                00000 00AD0    72 IEX40000 CSECT                                                        00073001
                                     73 *                                                                     00074001
                                     74 *        BIT PATTERNS                                                 00075001
                                     75 *                                                                     00076001
                      00020          76 FIRSTM   EQU   X'20'                 FIRST ENTRY IN SUTAB CHAIN       00077001
                      00010          77 SUCM     EQU   X'10'                 SUCCEDING ENTRY IN SUTAB CHAIN   00078001
                      00030          78 LASTM    EQU   X'30'                 LAST ENTRY IN SUTAB CHAIN        00079001
                      000CF          79 OFFM     EQU   X'CF'                 TURN OFF SUTAB CHAIN BITS        00080001
                      00040          80 SUOP     EQU   X'40'                 SUBSCRIPT OPTIMIZATION BIT       00081001
                                     81 *                                                                     00082001
                                     82          IEXENTRY 'IEX40000 LEVEL 2.1 &SYSDATE &SYSTIME'              00083001
                                     83+*                                                                     01-IEXEN
000000 47F0 F026            00026    84+         B     38(,R15)              BRANCH AROUND ID                 01-IEXEN
000004 21                            85+         DC    AL1(33)               LENGTH OF IDENTIFIER             01-IEXEN
000005 C9C5E7F4F0F0F0F0              86+         DC    CL33'IEX40000 LEVEL 2.1 08/17/12 13.13'               +01-IEXEN
                                       +                                             IDENTIFIER               01-IEXEN
                                     87 *                                                                     00084001
                 R:C  00000          88          USING IEX40000,R12                                           00085001
000026 18CF                          89          LR    R12,R15                                                00086001
                                     90 *                                                                     00087001
                 R:D  00000          91          USING WORKAREA,R13                                           00088001
000028 9180 D080      00080          92          TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?              00089001
00002C 4710 C442            00442    93          BO    NOSUTAB               YES                              00090001
                                     94 *                                                                     00091001
                                     95 *        INITIALIZE SUTAB                                             00092001
                                     96 *                                                                     00093001
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 Active USINGs: WORKAREA,R13  IEX40000,R12

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

000030 D503 D584 C5F0 00584 005F0    97          CLC   ZSUTEN(4),KF0          SUTAB EMPTY ?                   00094001
000036 4780 C442            00442    98          BE    NOSUTAB                YES                             00095001
                                     99 *                                                                     00096001
                                    100 *        ANY NESTED FOR LOOPS ?                                       00097001
                                    101 *                                                                     00098001
00003A 1B22                         102          SR    R2,R2                                                  00099001
00003C 5020 C5F8            005F8   103          ST    R2,FOR1                                                00100001
000040 D2FE C5FC C5FB 005FC 005FB   104          MVC   FOR1+4(255),FOR1+3     SET FOR STMT COUNT              00101001
000046 D2FE C6FA C6F9 006FA 006F9   105          MVC   FOR2+2(255),FOR2+1     AREAS TO ZERO                   00102001
00004C 4800 D578            00578   106          LH    R0,FSNMAX                                              00103001
000050 4A00 C802            00802   107          AH    R0,KH1                 NO OF FOR STMT                  00104001
000054 4110 D6CD            006CD   108          LA    R1,GPTAB                                               00105001
000058 4110 1003            00003   109 GP1      LA    R1,3(,R1)              PTR TO NEXT GPTAB RECORD        00106001
00005C D500 C5F0 1002 005F0 00002   110          CLC   KF0(1),2(R1)           FOR STATEMENT ?                 00107001
000062 4780 C058            00058   111          BE    GP1                    NO                              00108001
000066 4B00 C802            00802   112          SH    R0,KH1                 ALL FOR STMT CHECKED ?          00109001
00006A 4740 C09E            0009E   113          BM    GP10                   YES                             00110001
00006E D202 C7FC 1000 007FC 00000   114          MVC   FOR4(3),0(R1)          MOVE GPTAB RECORD               00111001
000074 4830 C7FC            007FC   115          LH    R3,FOR4                MULTIPLY GPTAB PTR BY 3         00112001
000078 1A33                         116          AR    R3,R3                  GIVES CORRECT ADDR              00113001
00007A 4A30 C7FC            007FC   117          AH    R3,FOR4                IN GPTAB                        00114001
00007E 4133 D6CD            006CD   118          LA    R3,GPTAB(R3)                                           00115001
000082 D500 C5F0 3002 005F0 00002   119          CLC   KF0(1),2(R3)           NESTED ?                        00116001
000088 4780 C058            00058   120          BE    GP1                    NO                              00117001
00008C 4320 C7FE            007FE   121          IC    R2,FOR4+2              FOR STMT NO+1                   00118001
000090 4142 C6F7            006F7   122          LA    R4,FOR2-1(R2)                                          00119001
000094 D200 4000 3002 00000 00002   123          MVC   0(1,R4),2(R3)          STORE ENCLOSING FSN             00120001
00009A 47F0 C058            00058   124          B     GP1                                                    00121001
                                    125 *                                                                     00122001
00009E 4120 C41E            0041E   126 GP10     LA    R2,TERMIN2             TERMINATION ADDR                00123001
0000A2 5020 D090            00090   127          ST    R2,ERET                                                00124001
0000A6 5800 D100            00100   128          L     R0,SUTAB40S            RESERVE TABLE AREA              00125001
0000AA 5A00 D0FC            000FC   129          A     R0,OPTABS                                              00126001
0000AE 1A00                         130          AR    R0,R0                                                  00127001
0000B0 4A00 C5F4            005F4   131          AH    R0,KH8                                                 00128001
0000B4 5000 D9AC            009AC   132          ST    R0,TABSIZE             SAVE LENGTH OF TABLE AREA       00129001
                                    133 *                                                                     00130001
                                    134          GETMAIN R,LV=(0)             ALLOCATE STORAGE TO SUTAB       00131001
                                    135+*        OS/VS2 RELEASE 4 VERSION -- 10/21/75                         01-GETMA
0000B8 4510 C0BC            000BC   136+         BAL   1,*+4                            INDICATE GETMAIN      01-GETMA
0000BC 0A0A                         137+         SVC   10                               ISSUE GETMAIN SVC     01-GETMA
                                    138 *                                                                     00132001
0000BE 4120 C3CA            003CA   139          LA    R2,TERM1               ERROR RETURN ADDR               00133001
0000C2 5020 D090            00090   140          ST    R2,ERET                                                00134001
0000C6 5010 D984            00984   141          ST    R1,TSTART              SUTAB START ADDR                00135001
                                    142 *                                                                     00136001
                                    143 *        READ SUTAB                                                   00137001
                                    144 *                                                                     00138001
0000CA 48A0 D57C            0057C   145          LH    R10,SUCOUNT            NUMBER OF SUTAB RECORDS - 1     00139001
0000CE 5890 C5E8            005E8   146          L     R9,SUTYPE              SUTAB RECORD IDENTIFICATION     00140001
0000D2 5880 D0F4            000F4   147          L     R8,SUTAB30S            LENGTH OF WRITTEN SUTAB RECORDS 00141001
0000D6 58B0 D984            00984   148          L     R11,TSTART             TABLE START ADDR                00142001
0000DA 4570 C4C0            004C0   149          BAL   R7,READ                READ FULL SUTAB                 00143001
                                    150 *                                                                     00144001
                                    151 *        R11                          END ADDR OF UNSORTED SUTAB      00145001
                                    152 *        R10                          FOR STATEMENT NUMBER            00146001
                                    153 *        R9                           CURRENT PTR IN UNSORTED SUTAB   00147001
                                    154 *        R8                           PTR FOR CHAINING CHECK          00148001
                                    155 *        R7                           FULL LENGTH OF DELETED ENTRIES  00149001
                                    156 *                                                                     00150001
                                    157 *        SCAN SUTAB FOR ENTRY CHAINING AND ENTRY DELETION             00151001
                                    158 *                                                                     00152001
0000DE 5890 D984            00984   159          L     R9,TSTART              TABLE START ADDR WITH KEY       00153001
0000E2 4190 9004            00004   160          LA    R9,4(,R9)              DELETE KEY                      00154001
0000E6 18B9                         161          LR    R11,R9                 CLACULATE END ADDR              00155001
0000E8 5AB0 D584            00584   162          A     R11,ZSUTEN                                             00156001
0000EC 1BAA                         163          SR    R10,R10                                                00157001
0000EE 1B77                         164          SR    R7,R7                                                  00158001
                                    165 *                                                                     00159001
0000F0 43A0 9000            00000   166 SUTABS   IC    R10,0(,R9)             ISOLATE ACTUAL FOR STATE NUMBER 00160001
0000F4 412A D478            00478   167          LA    R2,FSTAB(R10)          ADDR ACRUAL FOR ENTRY           00161001
0000F8 9140 2000      00000         168          TM    0(R2),SUOP             SUBSCRIPT OPTIMIZATION POSSIBLE? 00162001
0000FC 4780 C116            00116   169          BZ    SUTABS2                YES                             00163001
000100 4170 700E            0000E   170          LA    R7,14(,R7)             LENGTH OF DELETED ENTRIES       00164001
000104 92FF 9000      00000         171          MVI   0(R9),X'FF'            NOT OPTIMIZABLE ENTRY           00165001
000108 4190 900E            0000E   172          LA    R9,14(,R9)             GET NEXT ENTRY                  00166001
00010C 199B                         173          CR    R9,R11                 SUTAB END ?                     00167001
00010E 4780 C19E            0019E   174          BE    SORTSU                 YES                             00168001
000112 47F0 C0F0            000F0   175          B     SUTABS                                                 00169001
                                    176 *                                                                     00170001
000116 1889                         177 SUTABS2  LR    R8,R9                  CHECK ENTRY CHAINING            00171001
000118 4180 800E            0000E   178 SUTABS3  LA    R8,14(,R8)             SCAN SUTAB FOWORD FOR CHAINING  00172001
00011C 198B                         179          CR    R8,R11                 SUTAB END ?                     00173001
00011E 4780 C19E            0019E   180          BE    SORTSU                 YES                             00174001
000122 D503 900A 800A 0000A 0000A   181          CLC   10(4,R9),10(R8)        CHAIN ?                         00175001
000128 4780 C132            00132   182          BE    SUTABS4                YES                             00176001
00012C 1898                         183          LR    R9,R8                  PROCESS NEW ENTRY AS FIRST      00177001
00012E 47F0 C0F0            000F0   184          B     SUTABS                                                 00178001
                                    185 *                                                                     00179001
000132 43A0 8000            00000   186 SUTABS4  IC    R10,0(,R8)             ISOLATE FSN OF NEW ENTRY        00180001
000136 412A D478            00478   187          LA    R2,FSTAB(R10)          ADDR FSTAB ENTRY                00181001
00013A 9140 2000      00000         188          TM    0(R2),SUOP             SUBSCRIPT OPTIMIZABLE ?         00182001
00013E 4780 C14E            0014E   189          BZ    SUTABS5                YES                             00183001
000142 92FF 8000      00000         190          MVI   0(R8),X'FF'            NO, DELETE ENTRY                00184001
000146 4170 700E            0000E   191          LA    R7,14(,R7)             COUNT LENGTH OF DELETED ENTRIES 00185001
00014A 47F0 C118            00118   192          B     SUTABS3                CHECK NEXT ENTRY                00186001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    193 *                                                                      00187001
00014E 9620 900A      0000A         194 SUTABS5  OI    10(R9),FIRSTM        INDICATE FIRST ENTRY IN CHAIN     00188001
000152 1898                         195 SUTABS6  LR    R9,R8                ADDR CURRENT LAST CHAIN ENTRY     00189001
000154 4180 800E            0000E   196 SUTABS7  LA    R8,14(,R8)           CHECK NEXT SUTAB ENTRY            00190001
000158 198B                         197          CR    R8,R11               SUTAB END ?                       00191001
00015A 4780 C18E            0018E   198          BE    SUTABS9              YES                               00192001
00015E D503 900A 800A 0000A 0000A   199          CLC   10(4,R9),10(R8)      ANOTHER CHAINED ENTRY ?           00193001
000164 4780 C172            00172   200          BE    SUTABS8              YES                               00194001
000168 9630 900A      0000A         201          OI    10(R9),LASTM         INDICATE ENTRY IN CHAIN           00195001
00016C 1898                         202          LR    R9,R8                PROCESS NEW ENTRY AS FIRST        00196001
00016E 47F0 C0F0            000F0   203          B     SUTABS                                                 00197001
                                    204 *                                                                      00198001
000172 43A0 8000            00000   205 SUTABS8  IC    R10,0(,R8)           NEW FOR STATEMENT NUMBER          00199001
000176 412A D478            00478   206          LA    R2,FSTAB(R10)        ADDR FSTAB ENTRY                  00200001
00017A 9140 2000      00000         207          TM    0(R2),SUOP           SUBSCRIPT OPTIMIZATION POSSIBLE? 00201001
00017E 4780 C196            00196   208          BZ    SUTABS10             YES, CHAIN                        00202001
000182 92FF 8000      00000         209          MVI   0(R8),X'FF'          DELETE ENTRY                      00203001
000186 4170 700E            0000E   210          LA    R7,14(,R7)           CALCULATE DELETED LENGTH          00204001
00018A 47F0 C154            00154   211          B     SUTABS7                                                00205001
                                    212 *                                                                      00206001
00018E 9630 900A      0000A         213 SUTABS9  OI    10(R9),LASTM         INDICATE LAST ENTRY IN CHAIN      00207001
000192 47F0 C19E            0019E   214          B     SORTSU                                                 00208001
                                    215 *                                                                      00209001
000196 9610 900A      0000A         216 SUTABS10 OI    10(R9),SUCM          INDICATE BETWEEN ENTRY            00210001
00019A 47F0 C152            00152   217          B     SUTABS6                                                00211001
                                    218 *                                                                      00212001
00019E 5830 D984            00984   219 SORTSU   L     R3,TSTART                                              00213001
0001A2 4120 3004            00004   220          LA    R2,4(,R3)            START ADDR OF UNSORTED SUTAB      00214001
0001A6 5020 D98C            0098C   221          ST    R2,ZSTAD             START OF UNSORTED TABLE           00215001
0001AA 5890 D584            00584   222          L     R9,ZSUTEN            GET END OF UNSORTED SUTAB         00216001
0001AE 1A92                         223          AR    R9,R2                                                  00217001
0001B0 5A30 D9AC            009AC   224          A     R3,TABSIZE           END ADDR OF SORTED SUTAB          00218001
0001B4 5030 D998            00998   225          ST    R3,ZSUDEN                                              00219001
0001B8 5B30 D584            00584   226          S     R3,ZSUTEN                                              00220001
0001BC 1A37                         227          AR    R3,R7                START OF SORTED SUTAB             00221001
0001BE 5930 D998            00998   228          C     R3,ZSUDEN            WHOLE SUTAB DELETED ?             00222001
0001C2 4780 C44A            0044A   229          BE    NOSUTAB1             YES                               00223001
0001C6 5030 D994            00994   230          ST    R3,ZSUDAD                                              00224001
0001CA 5030 D990            00990   231          ST    R3,ZSORTSTA                                            00225001
0001CE 41B0 000E            0000E   232          LA    R11,14               ENTRY LENGTH                      00226001
0001D2 45F0 C530            00530   233          BAL   R15,SORT             SORT SUTAB                        00227001
                                    234 *                                                                      00228001
                                    235 *        INITIALIZE OPTAB BUFFERS                                      00229001
                                    236 *                                                                      00230001
0001D6 5820 D984            00984   237          L     R2,TSTART                                              00231001
0001DA 5020 D9A4            009A4   238          ST    R2,ZOTAWRI           SECOND OPTAB BUFFER               00232001
0001DE 5A20 D0FC            000FC   239          A     R2,OPTABS                                              00233001
0001E2 5020 D9A0            009A0   240          ST    R2,ZOTAFILL          FIRST OPTAB BUFFER                00234001
0001E6 5A20 D0FC            000FC   241          A     R2,OPTABS                                              00235001
0001EA 5020 D9A8            009A8   242          ST    R2,ZOTMAX            ACTUAL BUFFER END                 00236001
0001EE D503 D580 C5F0 00580 005F0   243          CLC   ZLEVEN(4),KF0        LVTAB EMPTY ?                     00237001
0001F4 4770 C202            00202   244          BNE   SORTLE               NO                                00238001
0001F8 D203 D99C D9A8 0099C 009A8   245          MVC   ZLESTA(4),ZOTMAX     SET DUMMY START ADDR              00239001
0001FE 47F0 C244            00244   246          B     SORTLE1                                                00240001
                                    247 *                                                                      00241001
000202 48A0 D57A            0057A   248 SORTLE   LH    R10,LVCOUNT          NUMBER OF LVTAB RECORDS - 7       00242001
000206 5890 C5EC            005EC   249          L     R9,LVTYPE            LVTAB RECORD IDENTIFICATION       00243001
00020A 5880 D0F8            000F8   250          L     R8,LVTAB30S          LENGTH OF LVTAB RECORD            00244001
00020E 58B0 D984            00984   251          L     R11,TSTART           START ADDR OF TABLE AREA          00245001
000212 4570 C4C0            004C0   252          BAL   R7,READ              READ LVTAB INTO CORE              00246001
000216 5820 D984            00984   253          L     R2,TSTART                                              00247001
00021A 4120 2004            00004   254          LA    R2,4(,R2)                                              00248001
00021E 5020 D98C            0098C   255          ST    R2,ZSTAD             START ADDR OF UNSORTED TABLE      00249001
000222 5A20 D580            00580   256          A     R2,ZLEVEN                                              00250001
000226 1892                         257          LR    R9,R2                END OF UNSORTED TABLE             00251001
000228 5920 D9A8            009A8   258          C     R2,ZOTMAX            LVTAB LONGER THAN OPTAB BUFFER ? 00252001
00022C 4720 C234            00234   259          BH    *+8                  YES                               00253001
000230 5820 D9A8            009A8   260          L     R2,ZOTMAX            NO, START SORTED TAB AFTER OPTAB 00254001
000234 5020 D990            00990   261          ST    R2,ZSORTSTA          START ADDR OF SORTED TABLE        00255001
000238 5020 D99C            0099C   262          ST    R2,ZLESTA                                              00256001
00023C 41B0 0004            00004   263          LA    R11,4                ENTRY LENGTH                      00257001
000240 45F0 C530            00530   264          BAL   R15,SORT             SORT LVTAB                        00258001
                                    265 *                                                                      00259001
000244 5820 D99C            0099C   266 SORTLE1  L     R2,ZLESTA                                              00260001
000248 5A20 D580            00580   267          A     R2,ZLEVEN                                              00261001
00024C 92FF 2000      00000         268          MVI   0(R2),X'FF'          SET LVTAB END                     00262001
000250 5820 D06C            0006C   269          L     R2,AUT3DCB           R2 -> SYSUT3 DCB                  00263001
                                    270 *                                                                      00264001
                                    271          CLOSE ((R2),REREAD),TYPE=T POINT TO BEGINNING OF DATASET     00265001
000254                              272+         CNOP  0,4                          ALIGN LIST TO FULLWORD 01-CLOSE
000254 4510 C25C            0025C   273+         BAL   1,*+8                        LOAD REG1 W/LIST ADDR  01-CLOSE
000258 00000000                     274+         DC    A(0)                         OPTION AND DCB ADDRESS 01-CLOSE
00025C 5021 0000            00000   275+         ST    R2,0(1,0)                    STORE DCB ADDRESS      01-CLOSE
000260 9290 1000      00000         276+         MVI   0(1),144                     MOVE IN OPTION BYTE    01-CLOSE
000264 0A17                         277+         SVC   23                           ISSUE TCLOSE SVC       01-CLOSE
                                    278 *                                                                      00266001
                                    279 *        R4                   PTR TO START OF LVTAB GROUP       00267001
                                    280 *        R5                   CURRENT PTR IN LVTAB GROUP        00268001
                                    281 *        R6                   CURRENT SUTAB PTR                 00269001
                                    282 *        R7                   SUTAB CHAIN SEARCHING PTR         00270001
                                    283 *        R8                   CURRENT OPTAB BUFFER PTR          00271001
                                    284 *        R9                                                     00272001
                                    285 *                                                                      00273001
000266 5840 D99C            0099C   286 OPTAB    L     R4,ZLESTA            START OF LVTAB                    00274001
00026A 5860 D994            00994   287          L     R6,ZSUDAD            START OF SUTAB                    00275001
00026E 5880 D9A0            009A0   288          L     R8,ZOTAFILL          START OF FIRST OPT AB BUFFER      00276001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    289 *                                                            00277001
                                    290 *         DOES LVTAB GROUP CORRESPOND TO THIS SUTAB ENTRY    00278001
                                    291 *                                                            00279001
000272 D500 6000 4000 00000 00000   292 OPT1      CLC   0(1,R6),0(R4)                                00280001
000278 4740 C2A4            002A4   293           BL    OPT3              NO LVTAB ENTRIES TO THIS FOR ST 00281001
00027C 1854                         294           LR    R5,R4             INITIALIZE CURRENT GROUP PTR    00282001
00027E 4720 C306            00306   295           BH    OPT6              SCAN FOR NEXT LVTAB GROUP       00283001
000282 D502 5001 6004 00001 00004   296 OPT2      CLC   1(3,R5),4(R6)     CHECK FACTOR                    00284001
000288 4780 C324            00324   297           BE    OPT71             NO OPTIMIZATION                 00285001
00028C D502 5001 6007 00001 00007   298           CLC   1(3,R5),7(R6)     CHECK ADDEND                    00286001
000292 4780 C31A            0031A   299           BE    OPT7              NO OPTIMIZATION                 00287001
000296 4150 5004            00004   300           LA    R5,4(0,R5)        ADDR NEXT LVTAB ENTRY           00288001
00029A D500 5000 4000 00000 00000   301           CLC   0(1,R5),0(R4)     NEW ENTRY OF SAME GROUP ?       00289001
0002A0 4780 C282            00282   302           BE    OPT2              YES, PROCEED CHECK              00290001
0002A4 5980 D9A8            009A8   303 OPT3      C     R8,ZOTMAX         END OF OPTAB BUFFER ?           00291001
0002A8 47B0 C37A            0037A   304           BNL   OPT10             YES                             00292001
0002AC D20D 8000 6000 00000 00000   305 OPT4      MVC   0(14,R8),0(R6)    MOVE SUTAB ENTRY TO OPTAB       00293001
0002B2 1B22                         306           SR    R2,R2                                             00294001
0002B4 4320 8000            00000   307           IC    R2,0(0,R8)        FOR STATEMENT NO                00295001
0002B8 1B00                         308           SR    R0,R0                                             00296001
0002BA 4302 C5F8            005F8   309 OPT42     IC    R0,FOR1(R2)       FOR STATEMENT COUNT             00297001
0002BE 4A00 C802            00802   310           AH    R0,KH1            INCREASE FS COUNT               00298001
0002C2 5500 C7F8            007F8   311           CL    R0,KF86           > 85 ENTRIES IN OPTAB ?         00299001
0002C6 4740 C2D2            002D2   312           BL    OPT44             NO                              00300001
0002CA 4112 D478            00478   313           LA    R1,FSTAB(R2)                                      00301001
0002CE 9680 1000      00000         314           OI    0(R1),X'80'       SET ELEMENTARY LOOP             00302001
0002D2 4202 C5F8            005F8   315 OPT44     STC   R0,FOR1(R2)       RESTORE FSN COUNT               00303001
0002D6 4322 C6F8            006F8   316           IC    R2,FOR2(R2)                                       00304001
0002DA 5520 C5F0            005F0   317           CL    R2,KF0            ANY ENCLOSING FOR STMT ?        00305001
0002DE 4780 C2EA            002EA   318           BE    OPT46             NO                              00306001
0002E2 4B20 C802            00802   319           SH    R2,KH1            GIVES CORRECT FSN               00307001
0002E6 47F0 C2BA            002BA   320           B     OPT42             ADD UP ENCLOSING LOOP           00308001
                                    321 *                                                            00309001
0002EA 4180 800E            0000E   322 OPT46     LA    R8,14(,R8)        UPDATE OPTAB PTR                00310001
0002EE 4160 600E            0000E   323 OPT5      LA    R6,14(,R6)        GET NEXT SUTAB ENTRY            00311001
0002F2 5960 D998            00998   324           C     R6,ZSUDEN         SUTAB END ?                     00312001
0002F6 4780 C382            00382   325           BE    TERMIN            YES                             00313001
0002FA 9110 600A      0000A         326           TM    10(R6),SUCM       ACTIVE ENTRY ?                  00314001
0002FE 4780 C272            00272   327           BZ    OPT1              YES                             00315001
000302 47F0 C2EE            002EE   328           B     OPT5              NO, GET NEXT ENTRY              00316001
                                    329 *                                                            00317001
                                    330 *         SCAN FOR NEXT LVTAB GROUP                          00318001
                                    331 *                                                            00319001
000306 4150 5004            00004   332 OPT6      LA    R5,4(,R5)         GET NEXT LVTAB ENTRY            00320001
00030A D500 5000 4000 00000 00000   333           CLC   0(1,R5),0(R4)     SAME GROUP ?                    00321001
000310 4780 C306            00306   334           BE    OPT6              YES                             00322001
000314 1845                         335           LR    R4,R5             NO, SET LVTAB GROUP PTR         00323001
000316 47F0 C272            00272   336           B     OPT1                                              00324001
                                    337 *                                                            00325001
00031A D502 6004 C5F0 00004 005F0   338 OPT7      CLC   4(3,R6),KF0       FACTOR ZERO ?                   00326001
000320 4780 C332            00332   339           BE    OPT72             YES                             00327001
000324 1B22                         340 OPT71     SR    R2,R2             ADDR FSTAB ENTRY                00328001
000326 4320 6000            00000   341           IC    R2,0(,R6)                                         00329001
00032A 4122 D478            00478   342           LA    R2,FSTAB(R2)                                      00330001
00032E 9680 2000      00000         343           OI    0(R2),X'80'       SET ELEMENTARY LOOP             00331001
                                    344 *                                                            00332001
                                    345 *         HANDLE SUTAB CHAINING                              00333001
                                    346 *                                                            00334001
000332 9120 600A      0000A         347 OPT72     TM    10(R6),FIRSTM     ANY CHAINING ?                  00335001
000336 4780 C2EE            002EE   348           BZ    OPT5                                              00336001
00033A 1876                         349           LR    R7,R6             INITIALIZE CHAIN SEARCH         00337001
00033C 4170 700E            0000E   350 OPT8      LA    R7,14(,R7)        NEXT SUTAB ENTRY                00338001
000340 D502 700B 600B 0000B 0000B   351           CLC   11(3,R7),11(R6)   ENTRY IN CHAIN ?                00339001
000346 4770 C33C            0033C   352           BNE   OPT8              NO                              00340001
00034A D100 C5F6 700A 005F6 0000A   353           MVN   SUPOS(1),10(R7)   SUBSCRIPT NUMBER                00341001
000350 D100 C357 600A 00357 0000A   354           MVN   *+7(1),10(R6)     SUBSCRIPT NUMBER                00342001
000356 9500 C5F6      005F6         355           CLI   SUPOS,0           SUBSCRIPT NUMBER EQUAL ?        00343001
00035A 4770 C33C            0033C   356           BNE   OPT8              NO                              00344001
00035E 9130 700A      0000A         357           TM    10(R7),LASTM      LAST ENTRY IN CHAIN ?           00345001
000362 4710 C372            00372   358           BO    OPT9              YES                             00346001
000366 94CF 700A      0000A         359           NI    10(R7),OFFM       TURN OFF CHAIN BITS             00347001
00036A 9620 700A      0000A         360           OI    10(R7),FIRSTM     SET FIRST ENTRY BIT             00348001
00036E 47F0 C2EE            002EE   361           B     OPT5                                              00349001
                                    362 *                                                            00350001
000372 94CF 700A      0000A         363 OPT9      NI    10(R7),OFFM       TURN OFF CHAIN BITS             00351001
000376 47F0 C2EE            002EE   364           B     OPT5                                              00352001
                                    365 *                                                            00353001
00037A 4590 C452            00452   366 OPT10     BAL   R9,OTACHA         CHANGE OPTAB BUFFER             00354001
00037E 47F0 C2AC            002AC   367           B     OPT4                                              00355001
                                    368 *                                                            00356001
000382 5980 D9A0            009A0   369 TERMIN    C     R8,ZOTAFILL       ANY OPTAB ?                     00357001
000386 4770 C392            00392   370           BNE   TERMINNO          YES                             00358001
00038A 9620 D082      00082         371           OI    COMPFLGS+2,NOPT   NO OPTAB PRESENT                00359001
00038E 47F0 C3CA            003CA   372           B     TERM1                                             00360001
                                    373 *                                                            00361001
000392 5980 D9A8            009A8   374 TERMINNO C      R8,ZOTMAX         END OF OPTAB BUFFER ?           00362001
000396 4770 C39E            0039E   375           BNE   TERMIN1           NO                              00363001
00039A 4590 C452            00452   376           BAL   R9,OTACHA         CHANGE OUTPUT BUFFER            00364001
00039E 92FF 8000      00000         377 TERMIN1   MVI   0(R8),X'FF'       INDICATE END OF SUTAB           00365001
0003A2 4590 C452            00452   378           BAL   R9,OTACHA         WRITE LAST OPTAB RECORD         00366001
                                    379 *                                                            00367001
                                    380           CHECK OWRITE            CHECK LAST OPTAB RECORD         00368001
0003A6 4110 C474            00474   381+          LA    1,OWRITE                    LOAD PARAMETER REG 1  02-IHBIN
0003AA 58E0 1008            00008   382+          L     14,8(0,1)         PICK UP DCB ADDR                01-CHECK
0003AE 58F0 E034            00034   383+          L     15,52(0,14)       LOAD CHECK ROUTINE ADDR         01-CHECK
0003B2 05EF                         384+          BALR  14,15             LINK TO CHECK ROUTINE           01-CHECK
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    385 *                                                                  00369001
0003B4 5800 D06C            0006C   386          L     R0,AUT3DCB            R0 -> SYSUT3 DCB              00370001
                                    387 *                                                                  00371001
                                    388          CLOSE ((R0),REREAD),TYPE=T  POINT TO BEGINNING OF DATASET 00372001
0003B8                              389+         CNOP  0,4                            ALIGN LIST TO FULLWORD 01-CLOSE
0003B8 4510 C3C0            003C0   390+         BAL   1,*+8                          LOAD REG1 W/LIST ADDR  01-CLOSE
0003BC 00000000                     391+         DC    A(0)                           OPTION AND DCB ADDRESS 01-CLOSE
0003C0 5001 0000            00000   392+         ST    R0,0(1,0)                      STORE DCB ADDRESS      01-CLOSE
0003C4 9290 1000      00000         393+         MVI   0(1),144                       MOVE IN OPTION BYTE    01-CLOSE
0003C8 0A17                         394+         SVC   23                             ISSUE TCLOSE SVC       01-CLOSE
                                    395 *                                                                  00373001
0003CA 4840 D578            00578   396 TERM1    LH    R4,FSNMAX                                           00374001
0003CE 1B33                         397          SR    R3,R3                                               00375001
0003D0 1B11                         398          SR    R1,R1                                               00376001
0003D2 4110 1001            00001   399 TERM12   LA    R1,1(,R1)                                           00377001
0003D6 1514                         400          CLR   R1,R4                 ALL FOR STMT CHECKED ?        00378001
0003D8 4720 C410            00410   401          BH    TERM15                YES                           00379001
0003DC 4121 C6F8            006F8   402          LA    R2,FOR2(R1)                                         00380001
0003E0 D500 C5F0 2000 005F0 00000   403          CLC   KF0(1),0(R2)          ANY ENCLOSING LOOP ?          00381001
0003E6 4780 C3D2            003D2   404          BE    TERM12                NO                            00382001
0003EA 4332 0000            00000   405          IC    R3,0(R2)              GET NO OF OPTAB ENTRIES       00383001
0003EE 1B22                         406          SR    R2,R2                                               00384001
0003F0 4323 C5F7            005F7   407          IC    R2,FOR1-1(R3)         IN ENCLOSING LOOP             00385001
0003F4 5520 C7F8            007F8   408          CL    R2,KF86               > 85 ?                        00386001
0003F8 4740 C3D2            003D2   409          BL    TERM12                NO                            00387001
0003FC 4120 00FF            000FF   410          LA    R2,255                MARK FOR SUCCEDING FS         00388001
000400 4221 C5F8            005F8   411          STC   R2,FOR1(R1)           THAT THIS FS IS ELEMENT       00389001
000404 4121 D478            00478   412          LA    R2,FSTAB(R1)                                        00390001
000408 9680 2000      00000         413          OI    0(R2),X'80'           SET ELEMENTARY LOOP           00391001
00040C 47F0 C3D2            003D2   414          B     TERM12                                              00392001
                                    415 *                                                                  00393001
000410 5800 D9AC            009AC   416 TERM15   L     R0,TABSIZE            LENGTH OF TABLE AREA          00394001
000414 5810 D984            00984   417          L     R1,TSTART                                           00395001
                                    418 *                                                                  00396001
                                    419          FREEMAIN R,LV=(0),A=(1)                                   00397001
                                    420+*        OS/VS2 RELEASE 3 VERSION  -- 10/25/74                     01-FREEM
000418 4110 1000            00000   421+         LA    1,0(0,1)                       CLEAR HI ORDER BYTE    01-FREEM
00041C 0A0A                         422+         SVC   10                             ISSUE FREEMAIN SVC     01-FREEM
                                    423 *                                                                  00398001
00041E 9108 D080      00080         424 TERMIN2  TM    COMPFLGS,ERR          ERROR CONDITION ?             00399001
000422 4710 C42A            0042A   425          BO    TERMERR               YES                           00400001
000426 47F0 C804            00804   426          B     IEX40001              SETUP INITIALIZATION FOR IEX50 00401001
                                    427 *                                                                  00402001
                                    428 TERMERR  XCTL  EP=IEX51ER2                                         00403001
00042A                              429+TERMERR  DS    0H                                                  01-XCTL
00042A 0700                         430+         CNOP  0,4                                                 02-IHBIN
00042C 45F0 C440            00440   431+         BAL   15,*+20          BRANCH AROUND CONSTANTS            02-IHBIN
000430 00000438                     432+         DC    A(*+8)           ADDR. OF PARM. LIST                02-IHBIN
000434 00000000                     433+         DC    A(0)              DCB ADDRESS PARAMETER             02-IHBIN
000438 C9C5E7F5F1C5D9F2             434+         DC    CL8'IEX51ER2'     EP PARAMETER                      02-IHBIN
000440 0A07                         435+         SVC   7                              ISSUE XCTL SVC         01-XCTL
                                    436 *                                                                  00404001
000442 9620 D082      00082         437 NOSUTAB  OI    COMPFLGS+2,NOPT       SET NO SUBSCRIPT OPTIMIZATION 00405001
000446 47F0 C41E            0041E   438          B     TERMIN2                                             00406001
                                    439 *                                                                  00407001
00044A 9620 D082      00082         440 NOSUTAB1 OI    COMPFLGS+2,NOPT       SET NO SUBSCRIPT OPTIMIZATION 00408001
00044E 47F0 C3CA            003CA   441          B     TERM1                                               00409001
                                    442 *                                                                  00410001
000452 47F0 C4B8            004B8   443 OTACHA   B     OTACHA2               FIRST TIME SWITCH             00411001
                                    444 *                                                                  00412001
                                    445          CHECK OWRITE                                              00413001
000456 4110 C474            00474   446+         LA    1,OWRITE                       LOAD PARAMETER REG 1   02-IHBIN
00045A 58E0 1008            00008   447+         L     14,8(0,1)          PICK UP DCB ADDR                 01-CHECK
00045E 58F0 E034            00034   448+         L     15,52(0,14)        LOAD CHECK ROUTINE ADDR          01-CHECK
000462 05EF                         449+         BALR  14,15              LINK TO CHECK ROUTINE            01-CHECK
                                    450 *                                                                  00414001
000464 5800 D06C            0006C   451 OTACHA1  L     R0,AUT3DCB            R0 -> SYSUT3 DCB              00415001
000468 5820 D9A0            009A0   452          L     R2,ZOTAFILL           ADDR OF BUFFER TO WRITE       00416001
00046C 5830 D0FC            000FC   453          L     R3,OPTABS             SIZE OF OPTAB BUFFER          00417001
                                    454 *                                                                  00418001
                                    455          WRITE OWRITE,SF,(R0),(R2),(R3)                            00419001
000470                              456+         CNOP  0,4                                                 02-IHBRD
000470 4510 C488            00488   457+         BAL   1,*+24             LOAD DECB ADDRESS                02-IHBRD
000474 00000000                     458+OWRITE   DC    F'0'                           EVENT CONTROL BLOCK    02-IHBRD
000478 00                           459+         DC    X'00'                          TYPE FIELD             02-IHBRD
000479 20                           460+         DC    X'20'                          TYPE FIELD             02-IHBRD
00047A 0000                         461+         DC    AL2(0)                         LENGTH                 02-IHBRD
00047C 00000000                     462+         DC    A(0)                           DCB ADDRESS            02-IHBRD
000480 00000000                     463+         DC    A(0)                           AREA ADDRESS           02-IHBRD
000484 00000000                     464+         DC    A(0)                           RECORD POINTER WORD    02-IHBRD
000488 5001 0008            00008   465+         ST    R0,8(1,0)                      STORE DCB ADDRESS      02-IHBRD
00048C 5021 000C            0000C   466+         ST    R2,12(1,0)                     STORE AREA ADDRESS     02-IHBRD
000490 4031 0006            00006   467+         STH   R3,6(1,0)         STORE LENGTH                      02-IHBRD
000494 58F1 0008            00008   468+         L     15,8(1,0)         LOAD DCB ADDRESS                  02-IHBRD
000498 58F0 F030            00030   469+         L     15,48(0,15)                    LOAD RDWR ROUTINE ADDR 02-IHBRD
00049C 05EF                         470+         BALR  14,15                          LINK TO RDWR ROUTINE   02-IHBRD
                                    471 *                                                                  00420001
00049E 5880 D9A4            009A4   472          L     R8,ZOTAWRI            CHANGE OPTAB BUFFERS          00421001
0004A2 D203 D9A4 D9A0 009A4 009A0   473          MVC   ZOTAWRI(4),ZOTAFILL                                 00422001
0004A8 5080 D9A0            009A0   474          ST    R8,ZOTAFILL                                         00423001
0004AC 1828                         475          LR    R2,R8                                               00424001
0004AE 5A20 D0FC            000FC   476          A     R2,OPTABS             BUFFER END ADDR               00425001
0004B2 5020 D9A8            009A8   477          ST    R2,ZOTMAX                                           00426001
0004B6 07F9                         478          BR    R9                                                  00427001
                                    479 *                                                                  00428001
0004B8 9200 C453      00453         480 OTACHA2  MVI   OTACHA+1,X'00'        SET OFF FIRST TIME SWITCH     00429001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0004BC 47F0 C464            00464   481          B     OTACHA1                                          00430001
                                    482 *                                                               00431001
                                    483 *        R11                     START ADDR OF INPUT AREA       00432001
                                    484 *        R10                     RECORD COUNT                   00433001
                                    485 *        R9                      RECORD IDENTIFICATION          00434001
                                    486 *        R8                      RECORD LENGTH                  00435001
                                    487 *        R7                      RETURN REGISTER                00436001
                                    488 *                                                               00437001
0004C0 5810 D06C            0006C   489 READ     L     R1,AUT3DCB        R1 -> SYSUT3 DCB               00438001
0004C4 9201 D0D3      000D3         490          MVI   SULTSTRT+3,X'01'  ADDR FIRST INPUT RECORD        00439001
                                    491 *                                                               00440001
                                    492          POINT (1),SULTSTRT                                     00441001
0004C8 4100 D0D0            000D0   493+         LA    0,SULTSTRT                  LOAD PARAMETER REG 0 02-IHBIN
0004CC 58F0 1054            00054   494+         L     15,84(0,1)         LOAD POINT RTN ADDR           01-POINT
0004D0 45EF 0004            00004   495+         BAL   14,4(15,0)         LINK TO POINT ROUTINE         01-POINT
                                    496 *                                                               00442001
0004D4 5820 D06C            0006C   497 READ1    L     R2,AUT3DCB        R2 -> SYSUT3 DCB               00443001
                                    498 *                                                               00444001
                                    499          READ  READR,SF,(R2),(R11),'S'                          00445001
0004D8                              500+         CNOP  0,4                                              02-IHBRD
0004D8 4510 C4F0            004F0   501+         BAL   1,*+24             LOAD DECB ADDRESS             02-IHBRD
0004DC 00000000                     502+READR    DC    F'0'                        EVENT CONTROL BLOCK  02-IHBRD
0004E0 80                           503+         DC    X'80'                       TYPE FIELD           02-IHBRD
0004E1 80                           504+         DC    X'80'                       TYPE FIELD           02-IHBRD
0004E2 0000                         505+         DC    AL2(0)                      LENGTH               02-IHBRD
0004E4 00000000                     506+         DC    A(0)                        DCB ADDRESS          02-IHBRD
0004E8 00000000                     507+         DC    A(0)                        AREA ADDRESS         02-IHBRD
0004EC 00000000                     508+         DC    A(0)                        RECORD POINTER WORD  02-IHBRD
0004F0 5021 0008            00008   509+         ST    R2,8(1,0)                   STORE DCB ADDRESS    02-IHBRD
0004F4 50B1 000C            0000C   510+         ST    R11,12(1,0)                 STORE AREA ADDRESS   02-IHBRD
0004F8 58F1 0008            00008   511+         L     15,8(1,0)         LOAD DCB ADDRESS               02-IHBRD
0004FC 58F0 F030            00030   512+         L     15,48(0,15)                 LOAD RDWR ROUTINE ADDR 02-IHBRD
000500 05EF                         513+         BALR  14,15                       LINK TO RDWR ROUTINE 02-IHBRD
                                    514 *                                                               00446001
                                    515          CHECK READR                                            00447001
000502 4110 C4DC            004DC   516+         LA    1,READR                     LOAD PARAMETER REG 1 02-IHBIN
000506 58E0 1008            00008   517+         L     14,8(0,1)          PICK UP DCB ADDR              01-CHECK
00050A 58F0 E034            00034   518+         L     15,52(0,14)        LOAD CHECK ROUTINE ADDR       01-CHECK
00050E 05EF                         519+         BALR  14,15              LINK TO CHECK ROUTINE         01-CHECK
                                    520 *                                                               00448001
000510 5990 B000            00000   521          C     R9,0(,R11)                                       00449001
000514 4770 C4D4            004D4   522          BNE   READ1                                            00450001
000518 D203 B000 D988 00000 00988   523          MVC   0(4,R11),SAVETAB  RESTORE OVERLAYED PART         00451001
00051E 46A0 C524            00524   524          BCT   R10,READ2         MORE RECORDS TO READ ?         00452001
000522 07F7                         525          BR    R7                NO                             00453001
                                    526 *                                                               00454001
000524 1AB8                         527 READ2    AR    R11,R8            UPDATE CURRENT PT2             00455001
000526 D203 D988 B000 00988 00000   528          MVC   SAVETAB(4),0(R11)                                00456001
00052C 47F0 C4D4            004D4   529          B     READ1                                            00457001
                                    530 *                                                               00458001
                                    531 *        R11                     LENGTH OF TABLE ENTRY          00459001
                                    532 *        R10                     CURRENT PTR IN UNSORTED TABLE  00460001
                                    533 *        R9                      END OF UNSORTED TABLE          00461001
                                    534 *        R15                     RETURN REGISTER                00462001
                                    535 *        R10                     RELATIVE ADDR IN SORTED TAB    00463001
                                    536 *        R8                      PTR TO ACTUAL ADDR TAB ENTRY   00464001
                                    537 *                                START ADDR OF SORTED TABLE     00465001
                                    538 *        R7                      PTR TO ACTUAL COUNT TAB ENTRY  00466001
                                    539 *        R3                      ADDR OF LAST COUNT TAB ENTRY   00467001
                                    540 *                                                               00468001
000530 D200 D588 C5F0 00588 005F0   541 SORT     MVC   ZCOSTA(1),KF0     ZERO TABLES                    00469001
000536 D2FD D589 D588 00589 00588   542          MVC   ZCOSTA+1(254),ZCOSTA                             00470001
00053C D2FE D687 D588 00687 00588   543          MVC   ZCOSTA+255(255),ZCOSTA                           00471001
000542 D2FE D786 D588 00786 00588   544          MVC   ZADSTA(255),ZCOSTA                               00472001
000548 D2FE D885 D588 00885 00588   545          MVC   ZADSTA+255(255),ZCOSTA                           00473001
00054E 58A0 D98C            0098C   546          L     R10,ZSTAD         CURRENT PTR                    00474001
                                    547 *                                                               00475001
000552 95FF A000      00000         548 SORT1    CLI   0(R10),X'FF'      DELETED ENTRY ?                00476001
000556 4780 C56E            0056E   549          BE    SORT2             YES                            00477001
00055A 1B22                         550          SR    R2,R2             ISOLATE ACTUAL FSN             00478001
00055C 4320 A000            00000   551          IC    R2,0(,R10)                                       00479001
000560 1A22                         552          AR    R2,R2             FSN * 2                        00480001
000562 4832 D588            00588   553          LH    R3,ZCOSTA(R2)     GET OLD COUNTER                00481001
000566 4130 3001            00001   554          LA    R3,1(,R3)         INCR                           00482001
00056A 4032 D588            00588   555          STH   R3,ZCOSTA(R2)     STORE NEW COUNTER              00483001
                                    556 *                                                               00484001
00056E 1AAB                         557 SORT2    AR    R10,R11           ADDR NEXT ENTRY                00485001
000570 19A9                         558          CR    R10,R9            END OF TABLE ?                 00486001
000572 4740 C552            00552   559          BL    SORT1             NO                             00487001
                                    560 *                                                               00488001
                                    561 *        BUILD ADDRESS TABLE                                    00489001
                                    562 *                                                               00490001
000576 4820 D578            00578   563          LH    R2,FSNMAX         GET ADDR OF LAST COUNT ENTRY   00491001
00057A 1A22                         564          AR    R2,R2                                            00492001
00057C 4132 D588            00588   565          LA    R3,ZCOSTA(R2)     LAST ENTRY                     00493001
000580 1BAA                         566          SR    R10,R10           RELATIVE ADDR IN NEW TABLE     00494001
000582 4170 D588            00588   567          LA    R7,ZCOSTA         CURRENT COUNT TABLE PTR        00495001
000586 4180 D788            00788   568          LA    R8,ZADSTA+2       CURRENT ADDR TABLE PTR         00496001
00058A 1973                         569 SORT3    CR    R7,R3             LAST ENTRY ?                   00497001
00058C 4720 C5A8            005A8   570          BH    SORT4             YES                            00498001
000590 4810 7000            00000   571          LH    R1,0(,R7)         NUMBER OF ENTRIES              00499001
000594 1C0B                         572          MR    R0,R11            COMPUTE TABLE LENGTH           00500001
000596 1AA1                         573          AR    R10,R1            RELATIVE TABLE ADDR            00501001
000598 40A0 8000            00000   574          STH   R10,0(,R8)        MAKE ENTRY IN ADDR TABLE       00502001
00059C 4170 7002            00002   575          LA    R7,2(,R7)         ADDR NEXT ENTRY                00503001
0005A0 4180 8002            00002   576          LA    R8,2(,R8)         ADDR NEXT ENTRY                00504001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0005A4 47F0 C58A            0058A   577          B     SORT3                                                      00505001
                                    578 *                                                                         00506001
                                    579 *        BUILD SORTED TABLE                                               00507001
                                    580 *                                                                         00508001
0005A8 58A0 D98C            0098C   581 SORT4    L     R10,ZSTAD                START OF UNSORTED TABLE           00509001
0005AC 5880 D990            00990   582          L     R8,ZSORTSTA              START OF SORTED TABLE             00510001
0005B0 182B                         583          LR    R2,R11                   INITIALIZE MOVE OF ENTRY          00511001
0005B2 0620                         584          BCTR  R2,0                                                       00512001
0005B4 4220 C5D7            005D7   585          STC   R2,SORTM+1               STORE LEN IN MVC INSTRUCTION      00513001
0005B8 95FF A000      00000         586 SORT5    CLI   0(R10),X'FF'             DELETED ENTRY ?                   00514001
0005BC 4780 C5DC            005DC   587          BE    SORT6                    YES                               00515001
0005C0 1B22                         588          SR    R2,R2                    ISOLATE FSN                       00516001
0005C2 4320 A000            00000   589          IC    R2,0(,R10)                                                 00517001
0005C6 1A22                         590          AR    R2,R2                    FSN * 2                           00518001
0005C8 4832 D786            00786   591          LH    R3,ZADSTA(R2)            GET RELATIVE ADDR                 00519001
0005CC 1803                         592          LR    R0,R3                    UPDATE RELATIVE ADDR              00520001
0005CE 1A0B                         593          AR    R0,R11                                                     00521001
0005D0 4002 D786            00786   594          STH   R0,ZADSTA(R2)                                              00522001
0005D4 1A38                         595          AR    R3,R8                    GET ADDR IN SORTED TABLE          00523001
0005D6 D200 3000 A000 00000 00000   596 SORTM    MVC   0(0,R3),0(R10)           MOVE ENTRY                        00524001
0005DC 1AAB                         597 SORT6    AR    R10,R11                  GET NEXT ENTRY                    00525001
0005DE 19A9                         598          CR    R10,R9                   END OF TABLE ?                    00526001
0005E0 4770 C5B8            005B8   599          BNE   SORT5                    NO                                00527001
0005E4 07FF                         600          BR    R15                                                        00528001
                                    601 *                                                                         00529001
0005E6 0000
0005E8                              602          DC    0F'0'                                                      00530001
0005E8 E2E4E3C2                     603 SUTYPE   DC    C'SUTB'                  SUTAB IDENTIFICATION              00531001
0005EC D3E5E3C2                     604 LVTYPE   DC    C'LVTB'                  LVTAB IDENTIFICATION              00532001
0005F0 00000000                     605 KF0      DC    F'0'                                                       00533001
0005F4 0008                         606 KH8      DC    H'8'                                                       00534001
0005F6 00                           607 SUPOS    DC    X'00'                                                      00535001
0005F7 00
0005F8                              608          DC    0F'0'                                                      00536001
0005F8 0000000000000000             609 FOR1     DC    XL256'00'                FOR STMT COUNT AREA               00537001
0006F8 0000000000000000             610 FOR2     DC    XL256'00'                ENCLOSING FS MARK AREA            00538001
0007F8 00000056                     611 KF86     DC    F'86'                    MAX ENTRIES IN OPTAB              00539001
0007FC 000000000000                 612 FOR4     DC    3H'0'                    WORK AREA FOR GPTAB REC           00540001
000802 0001                         613 KH1      DC    H'1'                                                       00541001
                                    614 *                                                                         00542001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

                                     616 *                                                                   00544001
                                     617 *        CALCULATE AND RESERVE SPACE NEEDED                         00545001
                                     618 *                                                                   00546001
000804 4120 CA96             00A96   619 IEX40001 LA    R2,INERR1                                             00547001
000808 5020 D090             00090   620          ST    R2,ERET               PROVIDE DIRECTORY RETURN ADDR   00548001
00080C 1B22                          621          SR    R2,R2                 INIT LENGTH OF RES AREA         00549001
00080E 5830 D0E0             000E0   622          L     R3,SRCE1S             GET LENGTH OF 1ST SOURCE BUFFER 00550001
000812 9140 D082       00082         623          TM    COMPFLGS+2,SPIC       SOURCE PROGRAM IN STORAGE ?     00551001
000816 4710 C81C             0081C   624          BO    IN16                  YES                             00552001
00081A 1823                          625          LR    R2,R3                 NO, OBTAIN A SECOND BUFFER      00553001
00081C 9120 D082       00082         626 IN16     TM    COMPFLGS+2,NOPT       ANY OPTAB ?                     00554001
000820 4710 C82C             0082C   627          BO    IN17                  NO                              00555001
000824 5840 D0FC             000FC   628          L     R4,OPTABS             OBTAIN LENGTH OF OPTAB BUFFER   00556001
000828 1A24                          629          AR    R2,R4                 ADD TO TOTAL LENGTH             00557001
00082A 1A24                          630          AR    R2,R4                 ADD LENGTH OF 2ND OPTAB BUFFER  00558001
00082C 5860 D108             00108   631 IN17     L     R6,OOSTACKS           OBTAIN LENGTH OF OPERATOR STACK 00559001
000830 1A26                          632          AR    R2,R6                 ADD TO TOTAL LENGTH             00560001
000832 4870 CAC6             00AC6   633          LH    R7,LLAT               OBTAIN LENGTH OF LAT            00561001
000836 1A27                          634          AR    R2,R7                 ADD TO TOTAL LENGTH             00562001
000838 5020 D62C             0062C   635          ST    R2,FREEMSIZ           STORE LENGTH OF RESERVED AREA   00563001
                                     636 *                                                                   00564001
                                     637          GETMAIN R,LV=(R2)           RESERVE AREA                    00565001
                                     638+*        OS/VS2 RELEASE 4 VERSION -- 10/21/75                       01-GETMA
00083C 1802                          639+         LR    0,R2                            LOAD LENGTH          01-GETMA
00083E 4510 C842             00842   640+         BAL   1,*+4                           INDICATE GETMAIN     01-GETMA
000842 0A0A                          641+         SVC   10                              ISSUE GETMAIN SVC    01-GETMA
                                     642 *                                                                   00566001
000844 4150 CAAE             00AAE   643          LA    R5,INERR2                                             00567001
000848 5050 D090             00090   644          ST    R5,ERET               PROVIDE NEW DIR RETURN ADDR     00568001
00084C 5010 D628             00628   645          ST    R1,FREEMADR           STORE ADDR OF RESERVED AREA     00569001
                                     646 *                                                                   00570001
                                     647 *        LOAD REGISTERS FOR REST OF PHASE                           00571001
                                     648 *                                                                   00572001
000850 5880 D0C8             000C8   649          L     R8,IBUF1                                              00573001
000854 5080 D600             00600   650          ST    R8,SOURCEB            SET FIRST BUFFER AS CURRENT     00574001
000858 18A1                          651          LR    R10,R1                GET CORRECT REG FOR OPT ST ADDR 00575001
00085A 9140 D082       00082         652          TM    COMPFLGS+2,SPIC       SOURCE PROGRAM IN STORAGE ?     00576001
00085E 4710 C86E             0086E   653          BO    IN18                  YES                             00577001
000862 50A0 D5FC             005FC   654          ST    R10,IBUF2             NO, STORE ADDR OF 2ND INPUT BUF 00578001
000866 50A0 D604             00604   655          ST    R10,RSRCB             SECOND BUFFER = READ BUFFER     00579001
00086A 41A3 A000             00000   656          LA    R10,0(R3,R10)         GET ADDR OF NEXT RESERVED AREA  00580001
00086E 9120 D082       00082         657 IN18     TM    COMPFLGS+2,NOPT       ANY OPTAB ?                     00581001
000872 4710 C892             00892   658          BO    IN19                  NO                              00582001
000876 50A0 D608             00608   659          ST    R10,OPBUF1            YES, STORE ADDR OF FIRST OPTBUF 00583001
00087A 50A0 D618             00618   660          ST    R10,AOPTABE           ADDR FIRST OPTAB ENTRY          00584001
00087E 50A0 D610             00610   661          ST    R10,OPBUFB            FIRST OPTBUF = CURRENT          00585001
000882 41A4 A000             00000   662          LA    R10,0(R4,R10)         GET ADDR OF SECOND OPTAB BUFFER 00586001
000886 50A0 D60C             0060C   663          ST    R10,OPBUF2            STORE        -''-               00587001
00088A 50A0 D614             00614   664          ST    R10,ROPTB             2ND OPTBUF = READ BUFFER        00588001
00088E 41A4 A000             00000   665          LA    R10,0(R4,R10)         GET ADDR OF OPERATOR STACK      00589001
000892 4196 A000             00000   666 IN19     LA    R9,0(R6,R10)          GET ADDR OF LAT                 00590001
000896 5090 D61C             0061C   667          ST    R9,LATAB              STORE IT                        00591001
00089A 0690                          668          BCTR  R9,0                  GET ADDR OF OPERAND STACK       00592001
00089C 5860 D0A4             000A4   669          L     R6,PRPT               PRPOINTER                       00593001
                                     670 *                                                                   00594001
                                     671 *        INITIALIZE WORKAREA FOR REST OF PHASE                      00595001
                                     672 *                                                                   00596001
0008A0 9120 D082       00082         673          TM    COMPFLGS+2,NOPT       ANY OPTAB ?                     00597001
0008A4 4780 C8B0             008B0   674          BZ    IN3A                  YES                             00598001
0008A8 4140 DA53             00A53   675          LA    R4,MAXFSN                                             00599001
0008AC 5040 D618             00618   676          ST    R4,AOPTABE            NO, STORE ADDR OF MAX FS NUMBER 00600001
0008B0 4140 DA9F             00A9F   677 IN3A     LA    R4,SUTABC-9                                           00601001
0008B4 5040 D620             00620   678          ST    R4,SUTABCA            INIT LAST USED SUTAB ENTRY      00602001
0008B8 4140 DA30             00A30   679          LA    R4,IOTAB                                              00603001
0008BC 4130 DA60             00A60   680          LA    R3,GPBN               COMPUTE LENGTH OF AREA WITH 0   00604001
0008C0 1B34                          681          SR    R3,R4                                                 00605001
0008C2 4230 C8CB             008CB   682          STC   R3,IN3B+1             STORE IN MOVE INSTRUCTION       00606001
0008C6 9200 4000       00000         683          MVI   0(R4),0                                               00607001
0008CA D200 4001 4000 00001 00000    684 IN3B     MVC   1(0,R4),0(R4)         MOVE ZEROES                     00608001
0008D0 92FF DA53       00A53         685          MVI   MAXFSN,X'FF'          INSERT MAX FS NUMBER            00609001
0008D4 9207 DA43       00A43         686          MVI   CII+1,X'07'                                           00610001
0008D8 9206 DA45       00A45         687          MVI   CIR+1,X'06'                                           00611001
0008DC 92F0 DA54       00A54         688          MVI   CLEARDIS,X'F0'                                        00612001
0008E0 9208 DA57       00A57         689          MVI   ONEENTRY+1,X'08'      INSERT VALUES FOR LONG PREC     00613001
0008E4 D201 DA62 CACA 00A62 00ACA    690          MVC   MAXOVERF(2),LONG                                      00614001
0008EA 9102 D080       00080         691          TM    COMPFLGS,LNG          LONG PRECISION ?                00615001
0008EE 4710 C900             00900   692          BO    IN3                   YES, BRANCH                     00616001
0008F2 9204 DA57       00A57         693          MVI   ONEENTRY+1,X'04'      SHORT, CHANGE VALUES            00617001
0008F6 9210 DA58       00A58         694          MVI   PRECMASK,X'10'                                        00618001
0008FA D201 DA62 CAC8 00A62 00AC8    695          MVC   MAXOVERF(2),SHORT                                     00619001
000900 92FF DA61       00A61         696 IN3      MVI   GPBN+1,X'FF'                                          00620001
000904 D201 D09C DA50 0009C 00A50    697          MVC   SEMCNT,KH0            ZERO SEMICOLON COUNTER          00621001
                                     698 *                                                                   00622001
                                     699 *        INITIALIZE OPERATOR STACK                                  00623001
                                     700 *                                                                   00624001
00090A 9225 A000       00000         701          MVI   0(R10),X'25'          INSERT OPERATOR ALPHA           00625001
                                     702 *                                                                   00626001
                                     703 *        INITIALIZATION OF LABEL ADDRESS TAB                        00627001
                                     704 *                                                                   00628001
00090E 5820 D61C             0061C   705          L     R2,LATAB                                              00629001
000912 9200 2000       00000         706          MVI   0(R2),0               ZERO BEGINNING OF LAT           00630001
000916 D26A 2001 2000 00001 00000    707          MVC   1(LATBEG-1,R2),0(R2)                                  00631001
00091C 4110 000F             0000F   708          LA    1,15                  ZERO                            00632001
000920 41B0 204F             0004F   709          LA    11,79(,R2)                REST                        00633001
000924 D2FF B001 B000 00001 00000    710 TSTZER   MVC   1(256,11),0(11)               OF                      00634001
00092A 41B0 B100             00100   711          LA    11,256(,11)                       LAT                 00635001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00092E 4610 C924            00924   712          BCT   1,TSTZER                             FOR        00636001
000932 D2AF B001 B000 00001 00000   713          MVC   1(176,11),0(11)                          TEST   00637001
000938 4130 001C            0001C   714          LA    R3,LATNR                                        00638001
00093C 9280 2000      00000         715 IN4      MVI   0(R2),X'80'           TURN ON FIRST BIT IN LAT ENTRY  00639001
000940 4120 2004            00004   716          LA    R2,4(,R2)             STEP ADDR                 00640001
000944 4630 C93C            0093C   717          BCT   R3,IN4                HANDLE NEXT ENTRY IF ANY  00641001
                                    718 *                                                          00642001
                                    719 *        START READ IN OF SOURCE PROGRAM, IF NECESSARY     00643001
                                    720 *                                                          00644001
000948 9140 D082      00082         721          TM    COMPFLGS+2,SPIC       SOURCE PROGRAM IN STORAGE ?  00645001
00094C 4780 C95C            0095C   722          BZ    IN6                   NO, NO BRANCHES WILL BE TAKEN  00646001
000950 96F0 C95D      0095D         723          OI    IN6+1,X'F0'           YES, ALL BRANCHES WILL BE TAKEN  00647001
000954 96F0 C9B9      009B9         724          OI    IN9+1,X'F0'                                     00648001
000958 96F0 CA35      00A35         725          OI    IN14+1,X'F0'                                    00649001
                                    726 *                                                          00650001
00095C 4700 C98E            0098E   727 IN6      NOP   IN22                  BRANCH IF SOURCE PROG IN CORE  00651001
000960 5830 D068            00068   728          L     R3,AUT2DCB            R3 -> SYSUT2 DCB          00652001
                                    729 *                                                          00653001
                                    730          READ  SRC1,SF,(3),(8)       READ FIRST SOURCE RECORD  00654001
000964                              731+         CNOP  0,4                                             02-IHBRD
000964 4510 C97C            0097C   732+         BAL   1,*+24                 LOAD DECB ADDRESS        02-IHBRD
000968 00000000                     733+SRC1     DC    F'0'                            EVENT CONTROL BLOCK  02-IHBRD
00096C 00                           734+         DC    X'00'                           TYPE FIELD      02-IHBRD
00096D 80                           735+         DC    X'80'                           TYPE FIELD      02-IHBRD
00096E 0000                         736+         DC    AL2(0)                          LENGTH          02-IHBRD
000970 00000000                     737+         DC    A(0)                            DCB ADDRESS     02-IHBRD
000974 00000000                     738+         DC    A(0)                            AREA ADDRESS    02-IHBRD
000978 00000000                     739+         DC    A(0)                            RECORD POINTER WORD  02-IHBRD
00097C 5031 0008            00008   740+         ST    3,8(1,0)                        STORE DCB ADDRESS  02-IHBRD
000980 5081 000C            0000C   741+         ST    8,12(1,0)                       STORE AREA ADDRESS  02-IHBRD
000984 58F1 0008            00008   742+         L     15,8(1,0)            LOAD DCB ADDRESS           02-IHBRD
000988 58F0 F030            00030   743+         L     15,48(0,15)                     LOAD RDWR ROUTINE ADDR 02-IHBRD
00098C 05EF                         744+         BALR  14,15                           LINK TO RDWR ROUTINE  02-IHBRD
                                    745 *                                                          00655001
00098E 0680                         746 IN22     BCTR  R8,0                  INIT SOURCE POINTER       00656001
                                    747 *                                                          00657001
                                    748 *        CONSTRUCT PBTAB3                                  00658001
                                    749 *                                                          00659001
000990 4120 D278            00278   750          LA    R2,PBTAB2             START ADDR OF PBTAB2 IN WORKAREA 00660001
000994 4150 D630            00630   751          LA    R5,PBTAB3             START ADDR OF PBTAB3 IN WORKAR  00661001
000998 4840 D09E            0009E   752          LH    R4,PBN                GET NUMBER OF PRG BLOCKS  00662001
00099C 4140 4001            00001   753          LA    R4,1(,R4)                                       00663001
0009A0 D201 5000 2000 00000 00000   754 IN8      MVC   0(2,R5),0(R2)         MOVE ONE PBTAB2 ENTRY     00664001
0009A6 D201 5002 DA50 00002 00A50   755          MVC   2(2,R5),KH0           ZERO REST OF ENTRY        00665001
0009AC 4120 2002            00002   756          LA    R2,2(,R2)             STEP ADDRS                00666001
0009B0 4150 5004            00004   757          LA    R5,4(,R5)                                       00667001
0009B4 4640 C9A0            009A0   758          BCT   R4,IN8                MOVE NEXT IF NOT ALL MOVED  00668001
                                    759 *                                                          00669001
                                    760 *        CHECK READ OF FIRST SOURCE RECORD IF NECESSARY    00670001
                                    761 *                                                          00671001
0009B8 4700 C9CA            009CA   762 IN9      NOP   IN10                  BRANCH IF SOURCE PROG IN CORE  00672001
                                    763 *                                                          00673001
                                    764          CHECK SRC1                                            00674001
0009BC 4110 C968            00968   765+         LA    1,SRC1                          LOAD PARAMETER REG 1  02-IHBIN
0009C0 58E0 1008            00008   766+         L     14,8(0,1)              PICK UP DCB ADDR         01-CHECK
0009C4 58F0 E034            00034   767+         L     15,52(0,14)            LOAD CHECK ROUTINE ADDR  01-CHECK
0009C8 05EF                         768+         BALR  14,15                  LINK TO CHECK ROUTINE    01-CHECK
                                    769 *                                                          00675001
0009CA 4120 0001            00001   770 IN10     LA    R2,1                  INIT RECORD COUNT         00676001
0009CE 4220 DA59            00A59   771          STC   R2,NUMBBL             STORE IT                  00677001
                                    772 *                                                          00678001
                                    773 *        START READING OF OPTAB                            00679001
                                    774 *                                                          00680001
0009D2 9120 D082      00082         775          TM    COMPFLGS+2,NOPT       OPTAB EMPTY ?             00681001
0009D6 4710 CA34            00A34   776          BO    IN14                  YES, BYPASS READING       00682001
0009DA 4120 CA34            00A34   777          LA    R2,IN14                                         00683001
0009DE 5020 D078            00078   778          ST    R2,EODUT3             GIVE ADDR OF EOD RTN TO DIR  00684001
0009E2 5820 D608            00608   779          L     R2,OPBUF1             GET ADDR OF FIRST BUFFER  00685001
0009E6 5840 D06C            0006C   780          L     R4,AUT3DCB            R4 -> SYSUT3 DCB          00686001
                                    781 *                                                          00687001
                                    782 IN12     READ  OPTB1,SF,(4),(2),'S'  READ FIRST RECORD         00688001
0009EA 0700                         783+         CNOP  0,4                                             02-IHBRD
0009EC 4510 CA04            00A04   784+IN12     BAL   1,*+24                 LOAD DECB ADDRESS        02-IHBRD
0009F0 00000000                     785+OPTB1    DC    F'0'                            EVENT CONTROL BLOCK  02-IHBRD
0009F4 80                           786+         DC    X'80'                           TYPE FIELD      02-IHBRD
0009F5 80                           787+         DC    X'80'                           TYPE FIELD      02-IHBRD
0009F6 0000                         788+         DC    AL2(0)                          LENGTH          02-IHBRD
0009F8 00000000                     789+         DC    A(0)                            DCB ADDRESS     02-IHBRD
0009FC 00000000                     790+         DC    A(0)                            AREA ADDRESS    02-IHBRD
000A00 00000000                     791+         DC    A(0)                            RECORD POINTER WORD  02-IHBRD
000A04 5041 0008            00008   792+         ST    4,8(1,0)                        STORE DCB ADDRESS  02-IHBRD
000A08 5021 000C            0000C   793+         ST    2,12(1,0)                       STORE AREA ADDRESS  02-IHBRD
000A0C 58F1 0008            00008   794+         L     15,8(1,0)            LOAD DCB ADDRESS           02-IHBRD
000A10 58F0 F030            00030   795+         L     15,48(0,15)                     LOAD RDWR ROUTINE ADDR 02-IHBRD
000A14 05EF                         796+         BALR  14,15                           LINK TO RDWR ROUTINE  02-IHBRD
                                    797 *                                                          00689001
                                    798          CHECK OPTB1                                           00690001
000A16 4110 C9F0            009F0   799+         LA    1,OPTB1                         LOAD PARAMETER REG 1  02-IHBIN
000A1A 58E0 1008            00008   800+         L     14,8(0,1)              PICK UP DCB ADDR         01-CHECK
000A1E 58F0 E034            00034   801+         L     15,52(0,14)            LOAD CHECK ROUTINE ADDR  01-CHECK
000A22 05EF                         802+         BALR  14,15                  LINK TO CHECK ROUTINE    01-CHECK
                                    803 *                                                          00691001
000A24 4700 CA34            00A34   804 IN13     NOP   IN14                  BRANCH AFTER SECOND CHECK  00692001
000A28 5820 D60C            0060C   805          L     R2,OPBUF2             GET ADDR OF SECOND BUFFER  00693001
000A2C 96F0 CA25      00A25         806          OI    IN13+1,X'F0'                                    00694001
000A30 47F0 C9EC            009EC   807          B     IN12                  READ SECOND RECORD        00695001
```

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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

                                    808 *                                                                    00696001
                                    809 *         READ SECOND SOURCE RECORD IF ANY                           00697001
                                    810 *                                                                    00698001
000A34 4700 CA7C          00A7C     811 IN14      NOP   IN15                  BRANCH IF SOURCE PROGRAM IN CORE 00699001
000A38 4120 CA7C          00A7C     812           LA    R2,IN15                                              00700001
000A3C 5020 D074          00074     813           ST    R2,EODUT2             GIVE ADDR OF EOD RTN TO DIR    00701001
000A40 5820 D5FC          005FC     814           L     R2,IBUF2              GET ADDR OF 2ND BUFFER         00702001
                                    815 *                                                                    00703001
                                    816           READ  SRC2,SF,(3),(2)       READ 2ND RECORD                00704001
000A44                              817+          CNOP  0,4                                                  02-IHBRD
000A44 4510 CA5C          00A5C     818+          BAL   1,*+24                 LOAD DECB ADDRESS             02-IHBRD
000A48 00000000                     819+SRC2      DC    F'0'                            EVENT CONTROL BLOCK  02-IHBRD
000A4C 00                           820+          DC    X'00'                           TYPE FIELD           02-IHBRD
000A4D 80                           821+          DC    X'80'                           TYPE FIELD           02-IHBRD
000A4E 0000                         822+          DC    AL2(0)                          LENGTH               02-IHBRD
000A50 00000000                     823+          DC    A(0)                            DCB ADDRESS          02-IHBRD
000A54 00000000                     824+          DC    A(0)                            AREA ADDRESS         02-IHBRD
000A58 00000000                     825+          DC    A(0)                            RECORD POINTER WORD  02-IHBRD
000A5C 5031 0008          00008     826+          ST    3,8(1,0)                        STORE DCB ADDRESS    02-IHBRD
000A60 5021 000C          0000C     827+          ST    2,12(1,0)                       STORE AREA ADDRESS   02-IHBRD
000A64 58F1 0008          00008     828+          L     15,8(1,0)           LOAD DCB ADDRESS                 02-IHBRD
000A68 58F0 F030          00030     829+          L     15,48(0,15)                     LOAD RDWR ROUTINE ADDR 02-IHBRD
000A6C 05EF                         830+          BALR  14,15                           LINK TO RDWR ROUTINE 02-IHBRD
                                    831 *                                                                    00705001
                                    832           CHECK SRC2                                                 00706001
000A6E 4110 CA48          00A48     833+          LA    1,SRC2                          LOAD PARAMETER REG 1 02-IHBIN
000A72 58E0 1008          00008     834+          L     14,8(0,1)              PICK UP DCB ADDR              01-CHECK
000A76 58F0 E034          00034     835+          L     15,52(0,14)            LOAD CHECK ROUTINE ADDR       01-CHECK
000A7A 05EF                         836+          BALR  14,15                  LINK TO CHECK ROUTINE         01-CHECK
                                    837 *                                                                    00707001
000A7C 94F7 D082    00082           838 IN15      NI    COMPFLGS+2,255-NOSC   SET SEMICOLON COUNTER VALID FLAG 00708001
                                    839 *                                                                    00709001
                                    840 *         XCTL TO NEXT LOAD MODULE                                   00710001
                                    841 *                                                                    00711001
                                    842           XCTL  EP=IEX50000                                          00712001
000A80                              843+          CNOP  0,4                                                  02-IHBIN
000A80 45F0 CA94          00A94     844+          BAL   15,*+20             BRANCH AROUND CONSTANTS          02-IHBIN
000A84 00000A8C                     845+          DC    A(*+8)              ADDR. OF PARM. LIST              02-IHBIN
000A88 00000000                     846+          DC    A(0)                 DCB ADDRESS PARAMETER           02-IHBIN
000A8C C9C5E7F5F0F0F0F0             847+          DC    CL8'IEX50000'        EP PARAMETER                    02-IHBIN
000A94 0A07                         848+          SVC   7                               ISSUE XCTL SVC       01-XCTL
                                    849 *                                                                    00713001
                                    850 *         DIRECTORY RETURN BEFORE GETMAIN                            00714001
                                    851 *                                                                    00715001
                                    852 INERR1    XCTL  EP=IEX51ER2                                          00716001
000A96                              853+INERR1    DS    0H                                                   01-XCTL
000A96 0700                         854+          CNOP  0,4                                                  02-IHBIN
000A98 45F0 CAAC          00AAC     855+          BAL   15,*+20             BRANCH AROUND CONSTANTS          02-IHBIN
000A9C 00000AA4                     856+          DC    A(*+8)              ADDR. OF PARM. LIST              02-IHBIN
000AA0 00000000                     857+          DC    A(0)                 DCB ADDRESS PARAMETER           02-IHBIN
000AA4 C9C5E7F5F1C5D9F2             858+          DC    CL8'IEX51ER2'        EP PARAMETER                    02-IHBIN
000AAC 0A07                         859+          SVC   7                               ISSUE XCTL SVC       01-XCTL
                                    860 *                                                                    00717001
                                    861 *         DIRECTORY RETURN AFTER GETMAIN                             00718001
                                    862 *                                                                    00719001
                                    863 INERR2    XCTL  EP=IEX51ER1                                          00720001
000AAE                              864+INERR2    DS    0H                                                   01-XCTL
000AAE 0700                         865+          CNOP  0,4                                                  02-IHBIN
000AB0 45F0 CAC4          00AC4     866+          BAL   15,*+20             BRANCH AROUND CONSTANTS          02-IHBIN
000AB4 00000ABC                     867+          DC    A(*+8)              ADDR. OF PARM. LIST              02-IHBIN
000AB8 00000000                     868+          DC    A(0)                 DCB ADDRESS PARAMETER           02-IHBIN
000ABC C9C5E7F5F1C5D9F1             869+          DC    CL8'IEX51ER1'        EP PARAMETER                    02-IHBIN
000AC4 0A07                         870+          SVC   7                               ISSUE XCTL SVC       01-XCTL
                                    871 *                                                                    00721001
                                    872 *         CONSTANTS                                                  00722001
                                    873 *                                                                    00723001
000AC6 1000                         874 LLAT      DC    H'4096'               LENGTH OF LABEL ADDR TABLE     00724001
000AC8 0FFC                         875 SHORT     DC    H'4092'               TO CHECK OBJ TIME STACK OVFLOW 00725001
000ACA 0FF8                         876 LONG      DC    H'4088'                            -''-          00726001
                                    877 *                                                                    00727001
000AD0                              878           LTORG                                                      00728001
                                    879 *                                                                    00729001
000000              00000 00DA8     880 WORKAREA DSECT                                                       00730001
                                    881 *                                                                    00731001
                                    882           COPY  WORKAREA                                             00732001
                                    883=*                                                                    00001001
                                    884=*         WORKAREA - MAPPING CSECT IEX00001                          00002001
                                    885=*                                                                    00003001
                                    886=*         ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT 00004001
                                    887=*                                                                    00005001
000000 0000000000000000             888=SAVEAREA DC     18F'0'                                               00006001
                                    889=*                                                                    00007001
                                    890=*         DCB ADDRS                                                  00008001
                                    891=*                                                                    00009001
000048                              892=DCBTABLE DC     0F'0'                                                00010001
000048 00000000                     893=ALINDCB  DC     A(0)                                                 00011001
00004C 00000000                     894=          DC    A(0)                                                 00012001
000050 00000000                     895=          DC    A(0)                                                 00013001
000054 00000000                     896=          DC    A(0)                                                 00014001
000058 00000000                     897=ASYSDCB  DC     A(0)                                                 00015001
00005C 00000000                     898=APRTDCB  DC     A(0)                                                 00016001
000060 00000000                     899=APCHDCB  DC     A(0)                                                 00017001
000064 00000000                     900=AUT1DCB  DC     A(0)                                                 00018001
000068 00000000                     901=AUT2DCB  DC     A(0)                                                 00019001
00006C 00000000                     902=AUT3DCB  DC     A(0)                                                 00020001
                                    903=*                                                                    00021001
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    904=*        END OF DATA EXIT ADDRS                                          00022001
                                    905=*                                                                        00023001
000070 00000000                     906=EODUT1   DC    A(0)                   SYSUT1                           00024001
000074 00000000                     907=EODUT2   DC    A(0)                   SYSUT2                           00025001
000078 00000000                     908=EODUT3   DC    A(0)                   SYSUT3                           00026001
00007C 00000000                     909=EODIN    DC    A(0)                   SYSIN                            00027001
                                    910=*                                                                        00028001
                                    911=*        OPTION SWITCHES IN COMPFLGS                                     00029001
                                    912=*                                                                        00030001
                                    913=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -                   00031001
                                    914=*                                                                        00032001
                                    915=*        PURPOSE                    POSITION                             00033001
                                    916=*                                   BYTE 1    BYTE 2    BYTE 3           00034001
                                    917=*                                   01234567  01234567  01234567         00035001
                                    918=*                                                                        00036001
                                    919=*        COMPMODE (SYNTAX CHECK)    X                                    00037001
                                    920=*        SUBSCRIPT OPTIMIZATION      X                                   00038001
                                    921=*        WARNING ERROR                X                                  00039001
                                    922=*        SERIOUS ERROR                 X                                 00040001
                                    923=*        TERMINATING ERROR              X                                00041001
                                    924=*        PROCEDURE/PROGRAM               X                               00042001
                                    925=*        LONG/SHORT PRECISION             X                              00043001
                                    926=*        OPERAND                           X                             00044001
                                    927=*                                                                        00045001
                                    928=*        NOSOURCE/SOURCE                      X                          00046001
                                    929=*        NOLOAD/LOAD                           X                         00047001
                                    930=*        NODECK/DECK                            X                        00048001
                                    931=*        ISO/EBCDIC                              X                       00049001
                                    932=*        PROGRAM INTERRUPT                        X                      00050001
                                    933=*        TERMINATING PHASE ENTERED                 X                     00051001
                                    934=*        NO BUFFERS ASSIGNED                        X                    00052001
                                    935=*        NO COMPILATION POSSIBLE                     X                   00053001
                                    936=*                                                                        00054001
                                    937=*        SYSPRINT DOWN                                  X                00055001
                                    938=*        WHOLE SOURCE PROG IN CORE                       X               00056001
                                    939=*        NO OPTAB                                         X              00057001
                                    940=*        SYSPRINT NOT OPENED                               X             00058001
                                    941=*        ERROR UNRELATED TO SEMICOLON NR                    X            00059001
                                    942=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)      X           00060001
                                    943=*        60 CHARACTER SET                                     X          00061001
                                    944=*        (RESERVED)                                            X         00062001
                                    945=*                                                                        00063001
000080 00220000                     946=COMPFLGS DC    X'00220000'            PARAMETERS AND SWITCHES          00064001
                                    947=*                                                                        00065001
                                    948=*        OPTION SWITCHES IN COMPFLGS                                     00066001
                                    949=*                                                                        00067001
                      00080         950=COMPMODE EQU   X'80'                  SYNTAX CHECK MODE                00068001
                      00040         951=SUBSCOPT EQU   X'40'                  SUBSCRIPT OPTIMIZATION           00069001
                      000FB         952=PGR      EQU   X'FB'                                                     00070001
                      00004         953=PROC     EQU   X'04'                  PRECOMPILED PROCEDURE            00071001
                                    954=*                                                                        00072001
                      000FD         955=SHRT     EQU   X'FD'                                                     00073001
                      00002         956=LNG      EQU   X'02'                                                     00074001
                      00001         957=OPERAND  EQU   X'01'                                                     00075001
                                    958=*                                                                        00076001
                                    959=*        ERROR SEVERITY INDICATORS IN COMPFLGS                           00077001
                                    960=*                                                                        00078001
                      00020         961=WERR     EQU   X'20'                  WARNING ERROR                    00079001
                      00010         962=SERR     EQU   X'10'                  SERIOUS ERROR                    00080001
                      00008         963=TERR     EQU   X'08'                  TERMINATING ERROR                00081001
                                    964=*                                                                        00082001
                                    965=*        OPTION SWITCHES IN COMPFLGS+1                                   00083001
                                    966=*                                                                        00084001
                      0007F         967=SRCE     EQU   X'7F'                                                     00085001
                      00080         968=NSRCE    EQU   X'80'                                                     00086001
                                    969=*                                                                        00087001
                      000BF         970=LOAD     EQU   X'BF'                                                     00088001
                      00040         971=NLOAD    EQU   X'40'                                                     00089001
                                    972=*                                                                        00090001
                      000DF         973=DECK     EQU   X'DF'                                                     00091001
                      00020         974=NDECK    EQU   X'20'                                                     00092001
                                    975=*                                                                        00093001
                      000EF         976=EBCDIC   EQU   X'EF'                                                     00094001
                      00010         977=ISO      EQU   X'10'                                                     00095001
                                    978=*                                                                        00096001
                                    979=*        TERMINATION SWITCHES IN COMPFLGS+1                              00097001
                                    980=*                                                                        00098001
                      00008         981=ERR      EQU   X'08'                  PROGRAM INTERRUPT HAS            00099001
                                    982=*                                     OCCURED IN COMPILER              00100001
                      00004         983=TERM     EQU   X'04'                  LAST PHASE HAS BEEN ENTERED      00101001
                      00002         984=NOBUF    EQU   X'02'                  ERROR POOL IS IN WORKAREA        00102001
                                    985=*                                     NO SCE PROG BUFF 1               00103001
                      00001         986=NOGO     EQU   X'01'                  COMPILATION NOT POSSIBLE         00104001
                                    987=*                                     DO NOT START SCAN 1              00105001
                      00003         988=NOBUNOGO EQU   X'03'                  NOBUF AND NOGO                   00106001
                                    989=*                                                                        00107001
                                    990=*        SWITCHES IN COMPFLGS+2                                          00108001
                                    991=*                                                                        00109001
                      00080         992=PRT      EQU   X'80'                  SYSPRINT NOT AVAILABLE           00110001
                      00040         993=SPIC     EQU   X'40'                  SOURCE PROGRAM IN STORAGE        00111001
                      00020         994=NOPT     EQU   X'20'                  NO SUBSCRIPT OPTIMIZATION        00112001
                      00010         995=PRTNO    EQU   X'10'                  SYSPRINT NOT OPENED              00113001
                      00008         996=NOSC     EQU   X'08'                  SEMICOLON COUNTER NOT VALID      00114001
                                    997=*                                                                        00115001
                      00004         998=NOTEST   EQU   X'04'                                                     00116001
                      000FB         999=TEST     EQU   X'FB'                  EMBED SC COUNT IN CODE (DEFAULT) 00117001
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D-Loc  Object Code      Addr1 Addr2  Stmt    Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     1000=*                                                             00118001
                        00002        1001=SET60     EQU   X'02'                60 CHARACTER SET IS TO BE USED   00119001
                                     1002=*                                                             00120001
                                     1003=*         MISCELLANEOUS CONTROL INFORMATION                   00121001
                                     1004=*                                                             00122001
000084 0000B000                      1005=SIZE      DC    F'45056'           AVAILABLE MAIN STORAGE - NOT USED   00123001
000088 00000000                      1006=PICAADD   DC    A(0)               ADDR OF PICA OF THE INVOKER        00124001
00008C 00000000                      1007=HDING     DC    F'0'               ADDR OF HEADING INFO OF THE INVOKER 00125001
000090 00000000                      1008=ERET      DC    F'0'               RETURN ADDR FOR PROGRAM            00126001
                                     1009=*                                  AND I/O ERRORS                     00127001
000094 0000000C                      1010=PAGECNT   DC    PL4'0'             PAGE COUNT                         00128001
000098 0000                          1011=LINCNT    DC    H'0'               COUNTER OF LINES PER PAGE          00129001
00009A 0038                          1012=MAXLINES  DC    H'56'              MAX NUMBER OF PRINT LINES PER PAGE 00130001
00009C 0000                          1013=SEMCNT    DC    H'0'               SEMICOLON COUNTER                  00131001
00009E 0032                          1014=PBN       DC    H'50'              HIGHEST PROGRAM BLOCK NUMBER       00132001
0000A0 0000                          1015=KBN       DC    H'0'               HIGHEST CONSTANT POOL NUMBER       00133001
                        0001C        1016=LATNR     EQU   28                 NR OF LIBRARY STAND FUNCTIONS      00134001
                        0006C        1017=LATBEG    EQU   4*(LATNR-1)                                           00135001
0000A2 006C                          1018=LN        DC    AL2(LATBEG)        LAST USED DISPLACEMENT IN LAT      00136001
0000A4 00000000                      1019=PRPT      DC    F'0'               PROGRAM POINTER                    00137001
0000A8 00000000                      1020=SAVOUTA   DC    F'0'                                                  00138001
0000AC                               1021=OUTAREA2  DS    F                  SYSPUNCH SAVE AREA                 00139001
0000B0 40404040                      1022=PIDENT    DC    CL4' '             PROGRAM IDENTIFICATION             00140001
0000B4 0000000C                      1023=CARDCNT   DC    PL4'0'             OBJECT PROGRAM DECK SEQUENCE NUMBER 00141001
0000B8 00000000                      1024=PRTRTADD  DC    A(0)               ADDR OF PRINT ROUTINE              00142001
                                     1025=*                                                             00143001
                                     1026=*         ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE   00144001
                                     1027=*                                                             00145001
0000BC 00000278                      1028=ERRPOOL   DC    A(PRELPOOL)        FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                      1029=NEXTERR   DC    A(PRELPOOL)        NEXT FREE PLACE IN ERROR POOL      00147001
0000C4                               1030=ENDPOOL   DS    F                  LAST BYTE OF ERROR POOL-23         00148001
0000C8                               1031=SRCE1ADD  DS    F                  SOURCE PROGRAM BUFFER 1            00149001
0000CC                               1032=SRCE1END  DS    F                  ADDR OF LAST BYTE+1                00150001
0000D0                               1033=SULTSTRT  DS    F                  ID OF LAST ITAB RECORD             00151001
                                     1034=*                                                             00152001
                                     1035=*                                                             00153001
                                     1036=*         TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS         00154001
                                     1037=*                                                             00155001
0000D4                               1038=INBLKS    DS    H                  MAX BLKSIZE FOR SYSIN     - NOT USED 00156001
0000D6                               1039=PRTBLKS   DS    H                  MAX BLKSIZE SYSPRINT      - NOT USED 00157001
0000D8                               1040=LINBLKS   DS    H                  MAX BLKSIZE FOR SYSLIN    - NOT USED 00158001
0000DA                               1041=PCHBLKS   DS    H                  MAX BLKSIZE FOR SYSPUNCH - NOT USED 00159001
0000DC                               1042=POOLS     DS    F                  SIZE OF ERROR POOL                 00160001
0000E0                               1043=SRCE1S    DS    F                  SIZE OF SOURCE PROG BUFFERS 1 AND 2 00161001
                        000E0        1044=SRCE3S    EQU   SRCE1S             SIZE OF SOURCE PROG BUFFERS 3 AND 4 00162001
0000E4                               1045=ITAB10S   DS    F                  SIZE OF ITAB FOR PHASE 10          00163001
0000E8                               1046=ITAB20S   DS    F                  SIZE OF ITAB FOR PHASE 20          00164001
0000EC                               1047=ITAB30S   DS    F                  SIZE OF ITAB FOR PHASE 30          00165001
0000F0                               1048=CRIDTABS  DS    F                  SIZE OF CRIDTAB FOR PHASE 30       00166001
0000F4                               1049=SUTAB30S  DS    F                  SIZE OF SUTAB BUFFER OF PHASE 30   00167001
0000F8                               1050=LVTAB30S  DS    F                  SIZE OF LVTAB BUFFER FOR PHASE 30  00168001
0000FC                               1051=OPTABS    DS    F                  SIZE OF OPTAB BUFFERS 1 AND 2      00169001
000100                               1052=SUTAB40S  DS    F                  SIZE OF SUTAB IN PHASE 40          00170001
000104                               1053=LVTAB40S  DS    F                  SIZE OF LVTAB IN PHASE 40          00171001
000108                               1054=OOSTACKS  DS    F                  SIZE OF OPERATOR/OPERAND STACK     00172001
                                     1055=*                                                             00173001
                                     1056=*         AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF   00174001
                                     1057=*         EACH NEW PAGE                                       00175001
                                     1058=*                                                             00176001
                        0010C        1059=PAGEHEAD  EQU   *                                                     00177001
00010C 4040404040404040              1060=PAGEHD1   DC    CL121' '                FIRST HEADLINE                00178001
000185                  00185 0010C  1061=          ORG   PAGEHD1                                               00179001
00010C F1                            1062=PAGEHD1C  DC    C'1'                    ASA CNTL                      00180001
00010D 4040404040404040              1063=          DC    CL10' '                 SPACER                        00181001
000117 4040404040404040              1064=PAGEHD1D  DC    CL100' '                PAGE TEXT HEADING             00182001
00017B                  0017B 0017D  1065=          ORG   PAGEHD1+113                                           00183001
00017D D7C1C7C5                      1066=PAGEHD1P  DC    CL4'PAGE'               PAGE                          00184001
000181 40404040                      1067=PAGENUMB  DC    CL4' '                  PAGE COUNTER                  00185001
000185                  00185 00185  1068=          ORG                                                         00186001
                                     1069=*                                                             00187001
000185 4040404040404040              1070=PAGEHD2   DC    CL121' '                SECOND HEADLINE               00188001
0001FE                  001FE 00185  1071=          ORG   PAGEHD2                                               00189001
000185 40                            1072=PAGEHD2C  DC    C' '                    ASA CNTL                      00190001
000186 4040404040404040              1073=          DC    CL10' '                 SPACER                        00191001
000190 4040404040404040              1074=PAGEHD2D  DC    CL100' '                PAGE TEXT HEADING             00192001
0001F4                  001F4 001FE  1075=          ORG                                                         00193001
                                     1076=*                                                             00194001
0001FE 4040404040404040              1077=PAGEHD3   DC    CL121' '                THIRD HEADLINE                00195001
000277                  00277 001FE  1078=          ORG   PAGEHD3                                               00196001
0001FE 40                            1079=PAGEHD3C  DC    C' '                    ASA CNTL                      00197001
0001FF 4040404040404040              1080=          DC    CL10' '                 SPACER                        00198001
000209 4040404040404040              1081=PAGEHD3D  DC    CL100' '                PAGE TEXT HEADING             00199001
00026D                  0026D 00277  1082=          ORG                                                         00200001
                                     1083=*                                                             00201001
                                     1084=*                                                             00202001
                                     1085=*         END OF STANDARD COMMON AREA                         00203001
                                     1086=*                                                             00204001
                        00277        1087=STANDX    EQU   *                                                     00205001
                                     1088=*                                                             00206001
                                     1089=*         THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL  00207001
                                     1090=*         PHASES AND PARTLY OVERLAY EACH OTHER                00208001
                                     1091=*                                                             00209001
                                     1092=*                     NAME OR PURPOSE          NEEDED BY PHASES 00210001
                                     1093=*                                                             00211001
000277 00
000278                               1094=          DC    0F'0'                                                 00212001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000278 4040404040404040              1095=PRELPOOL DC    236C' ',20C'X' PRELIMINARY ERROR POOL      IEX10          00213001
000378                  00378 00416  1096=         ORG   PRELPOOL+414                                              00214001
                                     1097=*                             DCB FOR SYSIN                  11          00215001
                                     1098=SYSIN    DCB   DDNAME=SYSIN,                                            X00216001
                                         =               DSORG=PS,                                                X00217001
                                         =               MACRF=(GM),                                              X00218001
                                         =               RECFM=FB,                                                X00219001
                                         =               LRECL=80,                                                X00220001
                                         =               BFTEK=S                                                   00221001


                                     1100+*                         DATA CONTROL BLOCK                           01-DCB
                                     1101+*                                                                      01-DCB
000416 0000
000418                               1102+SYSIN     DC    0F'0'                  ORIGIN ON WORD BOUNDARY          01-DCB

                                     1104+*                         DIRECT ACCESS DEVICE INTERFACE               01-DCB

000418 0000000000000000              1106+          DC    BL16'0'                 FDAD,DVTBL                       01-DCB
000428 00000000                      1107+          DC    A(0)                    KEYLE,DEVT,TRBAL                 01-DCB

                                     1109+*                         COMMON ACCESS METHOD INTERFACE               01-DCB

00042C 00                            1111+          DC    AL1(0)                 BUFNO                            01-DCB
00042D 000001                        1112+          DC    AL3(1)                 BUFCB                            01-DCB
000430 0000                          1113+          DC    AL2(0)            BUFL                                  01-DCB
000432 4000                          1114+          DC    BL2'0100000000000000'            DSORG                  01-DCB
000434 00000001                      1115+          DC    A(1)                    IOBAD                            01-DCB

                                     1117+*                         FOUNDATION EXTENSION                         01-DCB

000438 40                            1119+          DC    BL1'01000000'                 BFTEK,BFLN,HIARCHY        01-DCB
000439 000001                        1120+          DC    AL3(1)                 EODAD                            01-DCB
00043C 90                            1121+          DC    BL1'10010000'          RECFM                            01-DCB
00043D 000000                        1122+          DC    AL3(0)                 EXLST                            01-DCB

                                     1124+*                         FOUNDATION BLOCK                             01-DCB

000440 E2E8E2C9D5404040              1126+          DC    CL8'SYSIN'             DDNAME                           01-DCB
000448 02                            1127+          DC    BL1'00000010'          OFLGS                            01-DCB
000449 00                            1128+          DC    BL1'00000000'                         IFLG              01-DCB
00044A 5000                          1129+          DC    BL2'0101000000000000'  MACR                             01-DCB

                                     1131+*                         BSAM-BPAM-QSAM INTERFACE                     01-DCB

00044C 00                            1133+          DC    BL1'00000000'                                      RER1 01-DCB
00044D 000001                        1134+          DC    AL3(1)                 CHECK, GERR, PERR                01-DCB
000450 00000001                      1135+          DC    A(1)                   SYNAD                            01-DCB
000454 0000                          1136+          DC    H'0'                   CIND1, CIND2                     01-DCB
000456 0000                          1137+          DC    AL2(0)                 BLKSIZE                          01-DCB
000458 00000000                      1138+          DC    F'0'                   WCPO, WCPL, OFFSR, OFFSW         01-DCB
00045C 00000001                      1139+          DC    A(1)                   IOBA                             01-DCB
000460 00                            1140+          DC    AL1(0)                 NCP                              01-DCB
000461 000001                        1141+          DC    AL3(1)                 EOBR, EOBAD                      01-DCB

                                     1143+*                              QSAM INTERFACE                          01-DCB

000464 00000001                      1145+          DC    A(1)                    RECAD                            01-DCB
000468 0000                          1146+          DC    H'0'                   QSWS                             01-DCB
00046A 0050                          1147+          DC    AL2(80)          LRECL                                  01-DCB
00046C 00                            1148+          DC    BL1'00000000'          EROPT                            01-DCB
00046D 000001                        1149+          DC    AL3(1)                 CNTRL                            01-DCB
000470 00000000                      1150+          DC    F'0'                   PRECL                            01-DCB
000474 00000001                      1151+          DC    A(1)                   EOB                              01-DCB
                                     1152=*               SYNAD=SYNAD    (ASSEMBLED IN IEX00001)                   00222001
                                     1153=*               EODAD=EODADIN  (INSERTED BY IEX11)                       00223001
000478                  00478 00278  1154=         ORG   PRELPOOL                                                  00224001
000278                               1155=PBTAB2   DS    CL510          PROGR. BLOCK TABLE 2          20-50        00225001
000478                               1156=         DS    0F                                                        00226001
000478                               1157=PBTAB1   DS    CL255          PROGR. BLOCK TABLE 1          11-20        00227001
000577                  00577 00478  1158=         ORG   PBTAB1                                                    00228001
000478                               1159=FSTAB    DS    CL255          FOR STATEMENT TABLE           30-40        00229001
                                     1160=*                             DCB FOR SYSUT1                11-30        00230001
                                     1161=SYSUT1   DCB   DDNAME=SYSUT1,                                           X00231001
                                         =               DSORG=PS,                                                X00232001
                                         =               MACRF=(R,W),                                             X00233001
                                         =               RECFM=F                                                   00234001


                                     1163+*                         DATA CONTROL BLOCK                           01-DCB
                                     1164+*                                                                      01-DCB
000577 00
000578                               1165+SYSUT1    DC    0F'0'                  ORIGIN ON WORD BOUNDARY          01-DCB

                                     1167+*                         DIRECT ACCESS DEVICE INTERFACE               01-DCB

000578 0000000000000000              1169+          DC    BL16'0'                 FDAD,DVTBL                       01-DCB
000588 00000000                      1170+          DC    A(0)                    KEYLE,DEVT,TRBAL                 01-DCB

                                     1172+*                         COMMON ACCESS METHOD INTERFACE               01-DCB

00058C 00                            1174+          DC    AL1(0)                 BUFNO                            01-DCB
00058D 000001                        1175+          DC    AL3(1)                 BUFCB                            01-DCB
000590 0000                          1176+          DC    AL2(0)            BUFL                                  01-DCB
000592 4000                          1177+          DC    BL2'0100000000000000'            DSORG                  01-DCB
000594 00000001                      1178+          DC    A(1)                    IOBAD                            01-DCB
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                              X390 3.1.04  2012/08/17 13.13

                                    1180+*                    FOUNDATION EXTENSION                             01-DCB

000598 00                           1182+          DC    BL1'00000000'                BFTEK,BFLN,HIARCHY       01-DCB
000599 000001                       1183+          DC    AL3(1)                 EODAD                          01-DCB
00059C 80                           1184+          DC    BL1'10000000'          RECFM                          01-DCB
00059D 000000                       1185+          DC    AL3(0)                 EXLST                          01-DCB

                                    1187+*                    FOUNDATION BLOCK                                 01-DCB

0005A0 E2E8E2E4E3F14040             1189+          DC    CL8'SYSUT1'            DDNAME                         01-DCB
0005A8 02                           1190+          DC    BL1'00000010'          OFLGS                          01-DCB
0005A9 00                           1191+          DC    BL1'00000000'                         IFLG            01-DCB
0005AA 2020                         1192+          DC    BL2'0010000000100000'  MACR                           01-DCB

                                    1194+*                    BSAM-BPAM-QSAM INTERFACE                         01-DCB

0005AC 00                           1196+          DC    BL1'00000000'                                    RER1 01-DCB
0005AD 000001                       1197+          DC    AL3(1)                 CHECK, GERR, PERR              01-DCB
0005B0 00000001                     1198+          DC    A(1)                   SYNAD                          01-DCB
0005B4 0000                         1199+          DC    H'0'                   CIND1, CIND2                   01-DCB
0005B6 0000                         1200+          DC    AL2(0)                 BLKSIZE                        01-DCB
0005B8 00000000                     1201+          DC    F'0'                   WCPO, WCPL, OFFSR, OFFSW       01-DCB
0005BC 00000001                     1202+          DC    A(1)                   IOBA                           01-DCB
0005C0 00                           1203+          DC    AL1(0)                 NCP                            01-DCB
0005C1 000001                       1204+          DC    AL3(1)                 EOBR, EOBAD                    01-DCB

                                    1206+*                      BSAM-BPAM INTERFACE                            01-DCB

0005C4 00000001                     1208+          DC    A(1)                   EOBW                           01-DCB
0005C8 0000                         1209+          DC    H'0'                   DIRCT                          01-DCB
0005CA 0000                         1210+          DC    AL2(0)         LRECL                                  01-DCB
0005CC 00000001                     1211+          DC    A(1)                   CNTRL, NOTE, POINT             01-DCB
                                    1212=*               SYNAD=SYNAD,   (ASSEMBLED IN IEX00001)              00235001
                                    1213=*               EODAD=EODAD1                                          00236001
                                    1214=*                                                                     00237001
0005D0                              1215=          DS    0F                                                    00238001
0005D0                              1216=SPTAB     DS    CL255          SCOPE TABLE               11-30        00239001
0006D0                              1217=          DS    0F                                                    00240001
                      006CD         1218=GPTAB     EQU   *-3            GROUP TABLE               11-30        00241001
0006D0                              1219=          DS    CL1510                                                00242001
                                    1220=*                                                                     00243001
                                    1221=*         END OF SYMLIB PART OF COMMON WORK AREA                      00244001
                                    1222=*                                                                     00245001
                                    1223 *                                                                     00733001
000CB6                00CB6 00578   1224           ORG   SYSUT1                                                00734001
                                    1225 *                                                                     00735001
000578                              1226 FSNMAX    DS    H                                                     00736001
00057A                              1227 LVCOUNT   DS    H                                                     00737001
00057C                              1228 SUCOUNT   DS    H                                                     00738001
000580                              1229 ZLEVEN    DS    F                                                     00739001
000584                              1230 ZSUTEN    DS    F                                                     00740001
000588                              1231 ZCOSTA    DS    255H                   SORT COUNT TABLE               00741001
000786                              1232 ZADSTA    DS    255H                   SORT ADDR TABLE                00742001
000984                              1233 TSTART    DS    F                      START OF TABLE AREA            00743001
000988                              1234 SAVETAB   DS    F                      AREA TO SAVE TABLE END         00744001
00098C                              1235 ZSTAD     DS    F                      START ADDR OF UNSORTED TABLE   00745001
000990                              1236 ZSORTSTA  DS    F                      START ADDR OF SORTED TABLE     00746001
000994                              1237 ZSUDAD    DS    F                      START OF SORTED SUTAB          00747001
000998                              1238 ZSUDEN    DS    F                      END ADDR OF SORTED SUTAB       00748001
00099C                              1239 ZLESTA    DS    F                      START ADDR OF SORTED LUTAB     00749001
0009A0                              1240 ZOTAFILL  DS    F                      OPTAB WORK BUFFER ADDR         00750001
0009A4                              1241 ZOTAWRI   DS    F                      OPTAB WRITE BUFFER ADDR        00751001
0009A8                              1242 ZOTMAX    DS    F                      END OF OUTPUT BUFFER IN USE    00752001
0009AC                              1243 TABSIZE   DS    F                      SIZE OF TABLE AREA             00753001
                                    1244 *                                                                     00754001
                                    1245 *         AREA USED BY COMPILATION PHASE                              00755001
                                    1246 *                                                                     00756001
0009B0                009B0 00578   1247           ORG   SYSUT1                                                00757001
                                    1248 *                                                                     00758001
000578                              1249 RETADR    DS    17F                    SAVE AREA                      00759001
0005BC                              1250 PLACE14   DS    F                         -''-                        00760001
0005C0                              1251 RUTI      DS    9F                     GPR CONTROL                    00761001
0005E4                              1252 RUTR      DS    4F                     FLREG CONTROL                  00762001
0005F4                              1253 GPROLN    DS    H                      LABEL NR OF OBJ PRG ENTRY POINT 00763001
0005F6                              1254 KONSUM    DS    H                      WORKPLACE                      00764001
0005F8                              1255 WORKPL    DS    F                      WORKPLACE                      00765001
                      000C8         1256 IBUF1     EQU   SRCE1ADD               ADDR OF FIRST SOURCE BUFFER    00766001
0005FC                              1257 IBUF2     DS    A                        -''  SECOND    -''-          00767001
000600                              1258 SOURCEB   DS    A                        -''  CURRENT   -''-          00768001
000604                              1259 RSRCB     DS    A                        -''  READ      -''-          00769001
000608                              1260 OPBUF1    DS    A                      ADDR OF FIRST OPTAB BUFFER     00770001
00060C                              1261 OPBUF2    DS    A                        -''-  SECOND    -''-         00771001
000610                              1262 OPBUFB    DS    A                        -''-  CURRENT   -''-         00772001
000614                              1263 ROPTB     DS    A                        -''-  READ      -''-         00773001
000618                              1264 AOPTABE   DS    A                      ADDR OF CURRENT OPTAB ENTRY    00774001
00061C                              1265 LATAB     DS    A                      ADDR OF LABEL ADDR TABLE       00775001
                      0061C         1266 APBTAB4   EQU   LATAB                  ADDR OF PBTAB4                 00776001
000620                              1267 SUTABCA   DS    A                      ADDR OF LAST USED SUTAB ENTRY  00777001
000624                              1268 STRETURN  DS    F                      RETURN ADDR                    00778001
000628                              1269 FREEMADR  DS    A                      ADDR FOR FREEMAIN IN 50000     00779001
00062C                              1270 FREEMSIZ  DS    F                      SIZE            -''-           00780001
                                    1271 *                                                                     00781001
000630                              1272 PBTAB3    DS    1024C                  PROGRAM BLOCK TABLE, 3RD VERS  00782001
                                    1273 *                                                                     00783001
000A30 0000000000000000             1274 IOTAB     DC    18X'00'                LIST OF DATA SETS              00784001
000A42 0000                         1275 CII       DC    H'0'                   REGISTER CONTROL               00785001
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000A44 0000                        1276 CIR       DC    H'0'                         -''-                     00786001
000A46 0000                        1277 RII       DC    H'0'                         -''-                     00787001
000A48 0000                        1278 RIR       DC    H'0'                         -''-                     00788001
000A4A 0000                        1279 OPDPBN    DC    H'0'               PROGRAM BLOCK NR (BYTE 2 OF OPD 00789001
000A4C 0000                        1280 OPDADR    DC    H'0'               BYTES 3 AND 4 OF OPERAND        00790001
000A4E 0000                        1281 OPDLN     DC    H'0'               LABEL NUMBER TIMES FOUR         00791001
000A50 0000                        1282 KH0       DC    H'0'               ZEROES                          00792001
000A52 00                          1283 CFSN      DC    X'00'              CURRENT FS NUMBER               00793001
000A53 FF                          1284 MAXFSN    DC    X'FF'              MAX FS NUMBER                   00794001
000A54 F000                        1285 CLEARDIS DC     X'F000'            FOR CLEARING OF DISPLACEM PART  00795001
000A56 0004                        1286 ONEENTRY DC     H'4'               SHORT, FOR INCR OF OT STACK PTR 00796001
000A58                00A58 00A56  1287           ORG   ONEENTRY                                           00797001
000A56 0008                        1288           DC    H'8'               LONG            -''-            00798001
000A58 10                          1289 PRECMASK DC     X'10'              SHORT, TO MODIFY INSTRUCTIONS   00799001
000A59                00A59 00A58  1290           ORG   PRECMASK                                           00800001
000A58 00                          1291           DC    X'00'              LONG            -''-            00801001
000A59 00                          1292 NUMBBL    DC    X'00'              RECORD COUNTER                  00802001
000A5A                             1293           DS    H                                                  00803001
000A5C 0000                        1294 SPBNST    DC    H'0'               CURRENT PBN                     00804001
000A5E                             1295           DS    H                              AND DISPLACEMENT    00805001
000A60 00FF                        1296 GPBN      DC    H'255'             GLOBAL DSA CONTROL              00806001
000A62 0FFC                        1297 MAXOVERF DC     H'4092'            SHORT, TO CHECK OT STACK OVERFL 00807001
000A64                00A64 00A62  1298           ORG   MAXOVERF                                           00808001
000A62 0FF8                        1299           DC    H'4088'            LONG            -''-            00809001
000A64                             1300 HALFW     DS    H                  WORKPLACE                       00810001
000A66                             1301 USPEI2    DS    H                  FOR ARRAY DECLA-                00811001
000A68                             1302 USPEI4    DS    H                              RATION HANDLING     00812001
000A6A                             1303 WPLACE    DS    H                  FOR INSTRUCTION GENERATION      00813001
000A6C                             1304 XPLACE    DS    H                                                  00814001
000A6E                             1305 YPLACE    DS    H                                                  00815001
000A70                             1306 UPLACE    DS    H                                                  00816001
000A72                             1307 VPLACE    DS    C                          -''-                    00817001
000A73                             1308 STRDNAME DS     5C                 TO STORE OPERAND                00818001
000A78                             1309 CBVTAB    DS    48C                CALLED-BY-VALUE TABLE           00819001
000AA8                             1310 SUTABC    DS    768C               FOR SUBSCRIPT OPTIMIZATION      00820001
000DA8                00DA8 00AA8  1311           ORG   SUTABC                                             00821001
000AA8                             1312 DSTAB     DS    608C               DATA SET TABLE                  00822001
                                   1313 *                                                                  00823001
                                   1314 *         CHARACTER EQUATES                                        00824001
                                   1315 *                                                                  00825001
                                   1316           IEXCHAR                                                  00826001
                                   1317+*                                                                  01-IEXCH
                                   1318+*         CHARACTER A - Z                                          01-IEXCH
                                   1319+*                                                                  01-IEXCH
                      00040        1320+XFA       EQU   X'40'                                              02-IEXCG
                      00041        1321+XFB       EQU   X'41'                                              02-IEXCG
                      00042        1322+XFC       EQU   X'42'                                              02-IEXCG
                      00043        1323+XFD       EQU   X'43'                                              02-IEXCG
                      00044        1324+XFE       EQU   X'44'                                              02-IEXCG
                      00045        1325+XFF       EQU   X'45'                                              02-IEXCG
                      00046        1326+XFG       EQU   X'46'                                              02-IEXCG
                      00047        1327+XFH       EQU   X'47'                                              02-IEXCG
                      00048        1328+XFI       EQU   X'48'                                              02-IEXCG
                      00049        1329+XFJ       EQU   X'49'                                              02-IEXCG
                      0004A        1330+XFK       EQU   X'4A'                                              02-IEXCG
                      0004B        1331+XFL       EQU   X'4B'                                              02-IEXCG
                      0004C        1332+XFM       EQU   X'4C'                                              02-IEXCG
                      0004D        1333+XFN       EQU   X'4D'                                              02-IEXCG
                      0004E        1334+XFO       EQU   X'4E'                                              02-IEXCG
                      0004F        1335+XFP       EQU   X'4F'                                              02-IEXCG
                      00050        1336+XFQ       EQU   X'50'                                              02-IEXCG
                      00051        1337+XFR       EQU   X'51'                                              02-IEXCG
                      00052        1338+XFS       EQU   X'52'                                              02-IEXCG
                      00053        1339+XFT       EQU   X'53'                                              02-IEXCG
                      00054        1340+XFU       EQU   X'54'                                              02-IEXCG
                      00055        1341+XFV       EQU   X'55'                                              02-IEXCG
                      00056        1342+XFW       EQU   X'56'                                              02-IEXCG
                      00057        1343+XFX       EQU   X'57'                                              02-IEXCG
                      00058        1344+XFY       EQU   X'58'                                              02-IEXCG
                      00059        1345+XFZ       EQU   X'59'                                              02-IEXCG
                                   1346+*                                                                  01-IEXCH
                                   1347+*         NATIONAL CHARACTERS                                      01-IEXCH
                                   1348+*                                                                  01-IEXCH
                      0005A        1349+XFDOLLAR EQU    X'5A'                                              02-IEXCG
                      0005B        1350+XFUNDER  EQU    X'5B'                                              02-IEXCG
                      0005C        1351+XFHASH   EQU    X'5C'                                              02-IEXCG
                      0005D        1352+XFAT     EQU    X'5D'                                              02-IEXCG
                                   1353+*                                                                  01-IEXCH
                                   1354+*         NUMERIC 0 - 9                                            01-IEXCH
                                   1355+*                                                                  01-IEXCH
                      00030        1356+XF0       EQU   X'30'                                              02-IEXCG
                      00031        1357+XF1       EQU   X'31'                                              02-IEXCG
                      00032        1358+XF2       EQU   X'32'                                              02-IEXCG
                      00033        1359+XF3       EQU   X'33'                                              02-IEXCG
                      00034        1360+XF4       EQU   X'34'                                              02-IEXCG
                      00035        1361+XF5       EQU   X'35'                                              02-IEXCG
                      00036        1362+XF6       EQU   X'36'                                              02-IEXCG
                      00037        1363+XF7       EQU   X'37'                                              02-IEXCG
                      00038        1364+XF8       EQU   X'38'                                              02-IEXCG
                      00039        1365+XF9       EQU   X'39'                                              02-IEXCG
                                   1366+*                                                                  01-IEXCH
                                   1367+*         SPECIAL CHARS                                            01-IEXCH
                                   1368+*                                                                  01-IEXCH
                      00000        1369+XFPLUS   EQU    X'00'                                              02-IEXCG
                      00001        1370+XFMINUS  EQU    X'01'                                              02-IEXCG
                      00002        1371+XFASTER  EQU    X'02'                                              02-IEXCG
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D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.13

                      00003        1372+XFSLASH  EQU   X'03'                                                          02-IEXCG
                      00006        1373+XFLBRAC  EQU   X'06'                                                          02-IEXCG
                      00007        1374+XFCOLON  EQU   X'07'                                                          02-IEXCG
                      00008        1375+XFLSQBR  EQU   X'08'                                                          02-IEXCG
                      0000B        1376+XFSCOLON EQU   X'0B'                                                          02-IEXCG
                      00010        1377+XFEQUAL  EQU   X'10'                                                          02-IEXCG
                      00011        1378+XFLT     EQU   X'11'                                                          02-IEXCG
                      00012        1379+XFGT     EQU   X'12'                                                          02-IEXCG
                      00020        1380+XFNOT    EQU   X'20'                                                          02-IEXCG
                      00022        1381+XFOR     EQU   X'22'                                                          02-IEXCG
                      00023        1382+XFAMPER  EQU   X'23'                                                          02-IEXCG
                      00025        1383+XFCOMMA  EQU   X'25'                                                          02-IEXCG
                      00026        1384+XFRBRAC  EQU   X'26'                                                          02-IEXCG
                      00028        1385+XFRSQBR  EQU   X'28'                                                          02-IEXCG
                      0002B        1386+XFBLANK  EQU   X'2B'                                                          02-IEXCG
                      0002D        1387+XFPERIOD EQU   X'2D'                                                          02-IEXCG
                      0002E        1388+XFQUOTE  EQU   X'2E'                                                          02-IEXCG
                                   1389+*                                                                             01-IEXCH
                      0000C        1390+XFDQUOTE EQU   X'0C'                                                          02-IEXCG
                                   1391+*                                                                             01-IEXCH
                      0002C        1392+XFEXCLM  EQU   X'2C'                                                          02-IEXCG
                      0002C        1393+XFPERCT  EQU   X'2C'                                                          02-IEXCG
                                   1394+*                                                                             01-IEXCH
                                   1395+*        INTERNAL CONTROL CODES                                               01-IEXCH
                                   1396+*                                                                             01-IEXCH
                      00005        1397+XFPOWER    EQU   X'05'                                                        01-IEXCH
                      00016        1398+XFASSIGN   EQU   X'16'                                                        01-IEXCH
                      00017        1399+XFGOTO     EQU   X'17'                                                        01-IEXCH
                      00018        1400+XFFOR      EQU   X'18'                                                        01-IEXCH
                      0001D        1401+XFIF       EQU   X'1D'                                                        01-IEXCH
                      00027        1402+XFLABEL    EQU   X'27'                                                        01-IEXCH
                      00029        1403+XFDELTA    EQU   X'29'                                                        01-IEXCH
                      0002C        1404+XFEND      EQU   X'2C'                                                        01-IEXCH
                      0002F        1405+XFZETA     EQU   X'2F'                                                        01-IEXCH
                      0003E        1406+XFDECPT    EQU   X'3E'                                                        01-IEXCH
                                   1407 *                                                                             00827001
                                   1408 *        REGISTER EQUATES                                                     00828001
                                   1409 *                                                                             00829001
                                   1410          IEZREGS                                                              00830001
                      00000        1411+R0       EQU   0                                                              01-IEZRE
                      00001        1412+R1       EQU   1                                                              01-IEZRE
                      00002        1413+R2       EQU   2                                                              01-IEZRE
                      00003        1414+R3       EQU   3                                                              01-IEZRE
                      00004        1415+R4       EQU   4                                                              01-IEZRE
                      00005        1416+R5       EQU   5                                                              01-IEZRE
                      00006        1417+R6       EQU   6                                                              01-IEZRE
                      00007        1418+R7       EQU   7                                                              01-IEZRE
                      00008        1419+R8       EQU   8                                                              01-IEZRE
                      00009        1420+R9       EQU   9                                                              01-IEZRE
                      0000A        1421+R10      EQU   10                                                             01-IEZRE
                      0000B        1422+R11      EQU   11                                                             01-IEZRE
                      0000C        1423+R12      EQU   12                                                             01-IEZRE
                      0000D        1424+R13      EQU   13                                                             01-IEZRE
                      0000E        1425+R14      EQU   14                                                             01-IEZRE
                      0000F        1426+R15      EQU   15                                                             01-IEZRE
                                   1427 *                                                                             00831001
000000                             1428          END   IEX40000                                                       00832001
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Symbol    Length    Value     Id    Type Asm  Program    Defn  References                         X390 3.1.04  2012/08/17 13.13

AOPTABE        4 00000618 FFFFFFFF  A A                1264   660M  676M
AUT2DCB        4 00000068 FFFFFFFF  A A                 901   728
AUT3DCB        4 0000006C FFFFFFFF  A A                 902   269   386   451   489   497   780
CII            2 00000A42 FFFFFFFF  H H                1275   686M
CIR            2 00000A44 FFFFFFFF  H H                1276   687M
CLEARDIS       2 00000A54 FFFFFFFF  X X                1285   688M
COMPFLGS       4 00000080 FFFFFFFF  X X                 946    92   371M  424   437M  440M  623   626   652   657   673
                                                              691   721   775   838M
COMPMODE       1 00000080           U                   950    92
EODUT2         4 00000074 FFFFFFFF  A A                 907   813M
EODUT3         4 00000078 FFFFFFFF  A A                 908   778M
ERET           4 00000090 FFFFFFFF  F F                1008   127M  140M  620M  644M
ERR            1 00000008           U                   981   424
FIRSTM         1 00000020           U                    76   194   347   360
FOR1         256 000005F8 00000001  X X                 609   103M  104M  309   315M  407   411M
FOR2         256 000006F8 00000001  X X                 610   105M  122   316   402
FOR4           2 000007FC 00000001  H H                 612   114M  115   117   121
FREEMADR       4 00000628 FFFFFFFF  A A                1269   645M
FREEMSIZ       4 0000062C FFFFFFFF  F F                1270   635M
FSNMAX         2 00000578 FFFFFFFF  H H                1226   106   396   563
FSTAB        255 00000478 FFFFFFFF  C C                1159   167   187   206   313   342   412
GPBN           2 00000A60 FFFFFFFF  H H                1296   680   696M
GPTAB          1 000006CD FFFFFFFF  U                  1218   108   118
GP1            4 00000058 00000001  I                   109   111B  120B  124B
GP10           4 0000009E 00000001  I                   126   113B
IBUF1          4 000000C8 FFFFFFFF  U                  1256   649
IBUF2          4 000005FC FFFFFFFF  A A                1257   654M  814
IEX40000       1 00000000 00000001  J                    72    88U 1428
IEX40001       4 00000804 00000001  I                   619   426B
INERR1         2 00000A96 00000001  H H                 853   619
INERR2         2 00000AAE 00000001  H H                 864   643
IN10           4 000009CA 00000001  I                   770   762B
IN12           4 000009EC 00000001  I                   784   807B
IN13           4 00000A24 00000001  I                   804   806M
IN14           4 00000A34 00000001  I                   811   725M  776B  777   804B
IN15           4 00000A7C 00000001  I                   838   811B  812
IN16           4 0000081C 00000001  I                   626   624B
IN17           4 0000082C 00000001  I                   631   627B
IN18           4 0000086E 00000001  I                   657   653B
IN19           4 00000892 00000001  I                   666   658B
IN22           2 0000098E 00000001  I                   746   727B
IN3            4 00000900 00000001  I                   696   692B
IN3A           4 000008B0 00000001  I                   677   674B
IN3B           6 000008CA 00000001  I                   684   682M
IN4            4 0000093C 00000001  I                   715   717B
IN6            4 0000095C 00000001  I                   727   722B  723M
IN8            6 000009A0 00000001  I                   754   758B
IN9            4 000009B8 00000001  I                   762   724M
IOTAB          1 00000A30 FFFFFFFF  X X                1274   679
KF0            4 000005F0 00000001  F F                 605    97   110   119   243   317   338   403   541
KF86           4 000007F8 00000001  F F                 611   311   408
KH0            2 00000A50 FFFFFFFF  H H                1282   697   755
KH1            2 00000802 00000001  H H                 613   107   112   310   319
KH8            2 000005F4 00000001  H H                 606   131
LASTM          1 00000030           U                    78   201   213   357
LATAB          4 0000061C FFFFFFFF  A A                1265   667M  705  1266
LATBEG         1 0000006C           U                  1017   707  1018
LATNR          1 0000001C           U                  1016   714  1017
LLAT           2 00000AC6 00000001  H H                 874   633
LNG            1 00000002           U                   956   691
LONG           2 00000ACA 00000001  H H                 876   690
LVCOUNT        2 0000057A FFFFFFFF  H H                1227   248
LVTAB30S       4 000000F8 FFFFFFFF  F F                1050   250
LVTYPE         4 000005EC 00000001  C C                 604   249
MAXFSN         1 00000A53 FFFFFFFF  X X                1284   675   685M
MAXOVERF       2 00000A62 FFFFFFFF  H H                1297   690M  695M 1298
NOPT           1 00000020           U                   994   371   437   440   626   657   673   775
NOSC           1 00000008           U                   996   838
NOSUTAB        4 00000442 00000001  I                   437    93B   98B
NOSUTAB1       4 0000044A 00000001  I                   440   229B
NUMBBL         1 00000A59 FFFFFFFF  X X                1292   771M
OFFM           1 000000CF           U                    79   359   363
ONEENTRY       2 00000A56 FFFFFFFF  H H                1286   689M  693M 1287
OOSTACKS       4 00000108 FFFFFFFF  F F                1054   631
OPBUFB         4 00000610 FFFFFFFF  A A                1262   661M
OPBUF1         4 00000608 FFFFFFFF  A A                1260   659M  779
OPBUF2         4 0000060C FFFFFFFF  A A                1261   663M  805
OPTABS         4 000000FC FFFFFFFF  F F                1051   129   239   241   453   476   628
OPTB1          4 000009F0 00000001  F F                 785   799
OPT1           6 00000272 00000001  I                   292   327B  336B
OPT10          4 0000037A 00000001  I                   366   304B
OPT2           6 00000282 00000001  I                   296   302B
OPT3           4 000002A4 00000001  I                   303   293B
OPT4           6 000002AC 00000001  I                   305   367B
OPT42          4 000002BA 00000001  I                   309   320B
OPT44          4 000002D2 00000001  I                   315   312B
OPT46          4 000002EA 00000001  I                   322   318B
OPT5           4 000002EE 00000001  I                   323   328B  348B  361B  364B
OPT6           4 00000306 00000001  I                   332   295B  334B
OPT7           6 0000031A 00000001  I                   338   299B
OPT71          2 00000324 00000001  I                   340   297B
OPT72          4 00000332 00000001  I                   347   339B
OPT8           4 0000033C 00000001  I                   350   352B  356B
OPT9           4 00000372 00000001  I                   363   358B
OTACHA         4 00000452 00000001  I                   443   366B  376B  378B  480M
OTACHA1        4 00000464 00000001  I                   451   481B
OTACHA2        4 000004B8 00000001  I                   480   443B
```

```
Symbol    Length    Value     Id      Type Asm  Program   Defn  References                       X390 3.1.04  2012/08/17 13.13

OWRITE         4 00000474 00000001  F F                 458   381   446
PAGEHD1      121 0000010C FFFFFFFF  C C                1060  1061  1065
PAGEHD2      121 00000185 FFFFFFFF  C C                1070  1071
PAGEHD3      121 000001FE FFFFFFFF  C C                1077  1078
PBN            2 0000009E FFFFFFFF  H H                1014   752
PBTAB1       255 00000478 FFFFFFFF  C C                1157  1158
PBTAB2       510 00000278 FFFFFFFF  C C                1155   750
PBTAB3         1 00000630 FFFFFFFF  C C                1272   751
PRECMASK       1 00000A58 FFFFFFFF  X X                1289   694M 1290
PRELPOOL       1 00000278 FFFFFFFF  C C                1095  1028  1029  1096  1154
PRPT           4 000000A4 FFFFFFFF  F F                1019   669
READ           4 000004C0 00000001  I                   489   149B  252B
READR          4 000004DC 00000001  F F                 502   516
READ1          4 000004D4 00000001  I                   497   522B  529B
READ2          2 00000524 00000001  I                   527   524B
ROPTB          4 00000614 FFFFFFFF  A A                1263   664M
RSRCB          4 00000604 FFFFFFFF  A A                1259   655M
R0             1 00000000           U                  1411   106M  107M  112M  128M  129M  130M  131M  132   308M  309M
                                                              310M  311   315   386M  392   416M  451M  465   572M  592M
                                                              593M  594
R1             1 00000001           U                  1412   108M  109M  110   114   141   313M  314   398M  399M  400
                                                              402   411   412   417M  489M  571M  573   645   651
R10            1 0000000A           U                  1421   145M  163M  166M  167   186M  187   205M  206   248M  524M
                                                              546M  548   551   557M  558   566M  573M  574   581M  586
                                                              589   596   597M  598   651M  654   655   656M  659   660
                                                              661   662M  663   664   665M  666   701
R11            1 0000000B           U                  1422   148M  161M  162M  173   179   197   232M  251M  263M  510
                                                              521   523   527M  528   557   572   583   593   597
R12            1 0000000C           U                  1423    88U   89M
R13            1 0000000D           U                  1424    91U
R15            1 0000000F           U                  1426    84    89   233M  264M  600B
R2             1 00000002           U                  1413   102M  103   121M  122   126M  127   139M  140   167M  168
                                                              187M  188   206M  207   220M  221   223   237M  238   239M
                                                              240   241M  242   253M  254M  255   256M  257   258   260M
                                                              261   262   266M  267M  268   269M  275   306M  307M  309
                                                              313   315   316M  317   319M  340M  341M  342M  343   402M
                                                              403   405   406M  407M  408   410M  411   412M  413   452M
                                                              466   475M  476M  477   497M  509   550M  551M  552M  553
                                                              555   563M  564M  565   583M  584M  585   588M  589M  590M
                                                              591   594   619M  620   621M  625M  629M  630M  632M  634M
                                                              635   639   705M  706   707   709   715   716M  750M  754
                                                              756M  770M  771   777M  778   779M  805M  812M  813   814M
R3             1 00000003           U                  1414   115M  116M  117M  118M  119   123   219M  220   224M  225
                                                              226M  227M  228   230   231   397M  405M  407   453M  467
                                                              553M  554M  555   565M  569   591M  592   595M  596   622M
                                                              625   656   680M  681M  682   714M  717M  728M
R4             1 00000004           U                  1415   122M  123   286M  292   294   301   333   335M  396M  400
                                                              628M  629   630   662   665   675M  676   677M  678   679M
                                                              681   683   684   752M  753M  758M  780M
R5             1 00000005           U                  1416   294M  296   298   300M  301   332M  333   335   643M  644
                                                              751M  754   755   757M
R6             1 00000006           U                  1417   287M  292   296   298   305   323M  324   326   338   341
                                                              347   349   351   354   631M  632   666   669M
R7             1 00000007           U                  1418   149M  164M  170M  191M  210M  227   252M  349M  350M  351
                                                              353   357   359   360   363   525B  567M  569   571   575M
                                                              633M  634
R8             1 00000008           U                  1419   147M  177M  178M  179   181   183   186   190   195   196M
                                                              197   199   202   205   209   250M  288M  303   305   307
                                                              322M  369   374   377   472M  474   475   527   568M  574
                                                              576M  582M  595   649M  650   746M
R9             1 00000009           U                  1420   146M  159M  160M  161   166   171   172M  173   177   181
                                                              183M  194   195M  199   201   202M  213   216   222M  223M
                                                              249M  257M  366M  376M  378M  478B  521   558   598   666M
                                                              667   668M
SAVETAB        4 00000988 FFFFFFFF  F F                1234   523   528M
SEMCNT         2 0000009C FFFFFFFF  H H                1013   697M
SHORT          2 00000AC8 00000001  H H                 875   695
SORT           6 00000530 00000001  I                   541   233B  264B
SORTLE         4 00000202 00000001  I                   248   244B
SORTLE1        4 00000244 00000001  I                   266   246B
SORTM          6 000005D6 00000001  I                   596   585M
SORTSU         4 0000019E 00000001  I                   219   174B  180B  214B
SORT1          4 00000552 00000001  I                   548   559B
SORT2          2 0000056E 00000001  I                   557   549B
SORT3          2 0000058A 00000001  I                   569   577B
SORT4          4 000005A8 00000001  I                   581   570B
SORT5          4 000005B8 00000001  I                   586   599B
SORT6          2 000005DC 00000001  I                   597   587B
SOURCEB        4 00000600 FFFFFFFF  A A                1258   650M
SPIC           1 00000040           U                   993   623   652   721
SRCE1ADD       4 000000C8 FFFFFFFF  F F                1031  1256
SRCE1S         4 000000E0 FFFFFFFF  F F                1043   622  1044
SRC1           4 00000968 00000001  F F                 733   765
SRC2           4 00000A48 00000001  F F                 819   833
SUCM           1 00000010           U                    77   216   326
SUCOUNT        2 0000057C FFFFFFFF  H H                1228   145
SULTSTRT       4 000000D0 FFFFFFFF  F F                1033   490M  493
SUOP           1 00000040           U                    80   168   188   207
SUPOS          1 000005F6 00000001  X X                 607   353M  355
SUTABC         1 00000AA8 FFFFFFFF  C C                1310   677  1311
SUTABCA        4 00000620 FFFFFFFF  A A                1267   678M
SUTABS         4 000000F0 00000001  I                   166   175B  184B  203B
SUTABS10       4 00000196 00000001  I                   216   208B
SUTABS2        2 00000116 00000001  I                   177   169B
SUTABS3        4 00000118 00000001  I                   178   192B
SUTABS4        4 00000132 00000001  I                   186   182B
SUTABS5        4 0000014E 00000001  I                   194   189B
```

```
Symbol    Length    Value     Id      Type Asm  Program   Defn  References                          X390 3.1.04  2012/08/17 13.13

SUTABS6         2 00000152 00000001  I                     195   217B
SUTABS7         4 00000154 00000001  I                     196   211B
SUTABS8         4 00000172 00000001  I                     205   200B
SUTABS9         4 0000018E 00000001  I                     213   198B
SUTAB30S        4 000000F4 FFFFFFFF  F F                  1049   147
SUTAB40S        4 00000100 FFFFFFFF  F F                  1052   128
SUTYPE          4 000005E8 00000001  C C                   603   146
SYSUT1          4 00000578 FFFFFFFF  F F                  1165  1224  1247
TABSIZE         4 000009AC FFFFFFFF  F F                  1243   132M  224   416
TERMERR         2 0000042A 00000001  H H                   429   425B
TERMIN          4 00000382 00000001  I                     369   325B
TERMINNO        4 00000392 00000001  I                     374   370B
TERMIN1         4 0000039E 00000001  I                     377   375B
TERMIN2         4 0000041E 00000001  I                     424   126   438B
TERM1           4 000003CA 00000001  I                     396   139   372B  441B
TERM12          4 000003D2 00000001  I                     399   404B  409B  414B
TERM15          4 00000410 00000001  I                     416   401B
TSTART          4 00000984 FFFFFFFF  F F                  1233   141M  148   159   219   237   251   253   417
TSTZER          6 00000924 00000001  I                     710   712B
WORKAREA        1 00000000 FFFFFFFF  J                     880    91U
ZADSTA          2 00000786 FFFFFFFF  H H                  1232   544M  545M  568   591   594M
ZCOSTA          2 00000588 FFFFFFFF  H H                  1231   541M  542M  543M  544   545   553   555M  565   567
ZLESTA          4 0000099C FFFFFFFF  F F                  1239   245M  262M  266   286
ZLEVEN          4 00000580 FFFFFFFF  F F                  1229   243   256   267
ZOTAFILL        4 000009A0 FFFFFFFF  F F                  1240   240M  288   369   452   473   474M
ZOTAWRI         4 000009A4 FFFFFFFF  F F                  1241   238M  472   473M
ZOTMAX          4 000009A8 FFFFFFFF  F F                  1242   242M  245   258   260   303   374   477M
ZSORTSTA        4 00000990 FFFFFFFF  F F                  1236   231M  261M  582
ZSTAD           4 0000098C FFFFFFFF  F F                  1235   221M  255M  546   581
ZSUDAD          4 00000994 FFFFFFFF  F F                  1237   230M  287
ZSUDEN          4 00000998 FFFFFFFF  F F                  1238   225M  228   324
ZSUTEN          4 00000584 FFFFFFFF  F F                  1230    97   162   222   226
```

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)          X390 3.1.04  2012/08/17 13.13

    0(0)    106M  107M  112M  128M  129M  130M  131M  132   308M  309M  310M  311   315   386M  392   416M  451M  465
            493M  572M  592M  593M  594   639M
    1(1)    108M  109M  110   114   136M  141   273M  275N  276   313M  314   381M  382   390M  392N  393   398M  399M
            400   402N  411N  412N  417M  421M  446M  447   457M  465N  466N  467N  468N  489M  494   501M  509N  510N
            511N  516M  517   571M  572M  573   640M  645   651   708M  712M  732M  740N  741N  742N  765M  766   784M
            792N  793N  794N  799M  800   818M  826N  827N  828N  833M  834
    2(2)    102M  103   121M  122N  126M  127   139M  140   167M  168   187M  188   206M  207   220M  221   223   237M
            238   239M  240   241M  242   253M  254M  255   256M  257   258   260M  261   262   266M  267M  268   269M
            275   306M  307M  309N  313N  315N  316M  316N  317   319M  340M  341M  342M  342N  343   402M  403   405N
            406M  407M  408   410M  411   412M  413   452M  466   475M  476M  477   497M  509   550M  551M  552M  553N
            555N  563M  564M  565N  583M  584M  585   588M  589M  590M  591N  594N  619M  620   621M  625M  629M  630M
            632M  634M  635   639   705M  706   707   709   715   716M  750M  754   756M  770M  771   777M  778   779M
            793   805M  812M  813   814M  827
    3(3)    115M  116M  117M  118M  118N  119   123   219M  220   224M  225   226M  227M  228   230   231   397M  405M
            407N  453M  467   553M  554M  555   565M  569   591M  592   595M  596   622M  625   656N  680M  681M  682
            714M  717M  728M  740   826
    4(4)    122M  123   286M  292   294   301   333   335M  396M  400   628M  629   630   662N  665N  675M  676   677M
            678   679M  681   683   684   752M  753M  758M  780M  792
    5(5)    294M  296   298   300M  301   332M  333   335   643M  644   751M  754   755   757M
    6(6)    287M  292   296   298   305   323M  324   326   338   341   347   349   351   354   631M  632   666N  669M
    7(7)    149M  164M  170M  191M  210M  227   252M  349M  350M  351   353   357   359   360   363   525B  567M  569
            571   575M  633M  634
    8(8)    147M  177M  178M  179   181   183   186   190   195   196M  197   199   202   205   209   250M  288M  303
            305   307   322M  369   374   377   472M  474   475   527   568M  574   576M  582M  595   649M  650   741
            746M
    9(9)    146M  159M  160M  161   166   171   172M  173   177   181   183M  194   195M  199   201   202M  213   216
            222M  223M  249M  257M  366M  376M  378M  478B  521   558   598   666M  667   668M
   10(A)    145M  163M  166M  167N  186M  187N  205M  206N  248M  524M  546M  548   551   557M  558   566M  573M  574
            581M  586   589   596   597M  598   651M  654   655   656M  659   660   661   662M  663   664   665M  666
            701
   11(B)    148M  161M  162M  173   179   197   232M  251M  263M  510   521   523   527M  528   557   572   583   593
            597   709M  710   711M  713
   12(C)     88U   89M
   13(D)     91U
   14(E)    382M  383   384M  447M  448   449M  470M  495M  513M  517M  518   519M  744M  766M  767   768M  796M  800M
            801   802M  830M  834M  835   836M
   15(F)     84B   89   233M  264M  383M  384B  431M  448M  449B  468M  469M  470B  494M  495N  511M  512M  513B  518M
            519B  600B  742M  743M  744B  767M  768B  794M  795M  796B  801M  802B  828M  829M  830B  835M  836B  844M
            855M  866M
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| WORKAREA | 00000DA8 | FFFFFFFF | 880 | | PRIMARY INPUT |

```
Con Source       Members                                                                             X390 3.1.04  2012/08/17 13.13

  1 SYS1.MACLIB
               CHECK    CLOSE    DCB      FREEMAIN GETMAIN  IEZREGS  IHBINNRA IHBINNRB IHBRDWRS IHB01    POINT
               READ     WRITE    XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
  4 SYSD.ALGOLF.MACLIB
               IEXCGEN  IEXCHAR  IEXENTRY WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text | X390 3.1.04 2012/08/17 13.13 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 88 | | USING | Ordinary | 00000001 | 00000000 | 00001000 | 12 | 00ACA | 866 | IEX40000,R12 | |
| 91 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 13 | 00A9F | 838 | WORKAREA,R13 | |

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X40    STEPNAME: IEX40    PROCSTEP: X390

Primary input:  lines      1 to     832 of SYSD.ALGOLF.ASM(IEX40)

SYSLIB library records read: 4393

SYSUT1 work file size: 141731 bytes

SYSUT2 work file size: 366038 bytes

SYSUT3 work file size: 66560 bytes

SYSLIN file records written: 53

TXA000I Return code 0, elapsed time 4.64 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

```
Csect    Rel Addr(hex) Length(dec)
IEX40000    000ACC          4
```

# IEX50

## LEVEL

## V2.M01

 X390 3.1.04 2012/08/17 13.13

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcessS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX50)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131323.RA000.T1X50.OBJECT
SYSPRINT    JES2.JOB09278.SO0102
SYSUT1      SYS12230.T131323.RA000.T1X50.SYSUT1
SYSUT2      SYS12230.T131323.RA000.T1X50.SYSUT2
SYSUT3      SYS12230.T131323.RA000.T1X50.SYSUT3
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Active USINGs: None

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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

*                                                                      00002001
*        COMPONENT ID - 360S-AL-531 ALGOL F COMPILER                   00003001
*                                                                      00004001
*        FUNCTION/OPERATION -                                          00005001
*        THIS MODULE PERFORMS THE REAL TRANSLATION OF THE SOURCE       00006001
*        PROGRAM INTO SYSTEM/360 INSTRUCTIONS. THE SOURCE              00007001
*        PROGRAM IS AT MODIFICATION LEVEL 2 AND CONSISTS OF A          00008001
*        SEQUENCE OF ONE BYTE OPERATORS AND FIVE BYTE OPERANDS,        00009001
*        WHICH IS SCANNED SEQUENTIALLY. THE STATUS OF RECOGNITION      00010001
*        OF THE SOURCE PROGRAM IS DESCRIBED BY -                       00011001
*        1. A SEQUENCE OF CONTEXTS (SEE BELOW)                         00012001
*        2. A SEQUENCE OF STACKED OPERATORS (THE OPERATOR STACK)       00013001
*                                                                      00014001
*        THE ACTION OF THE COMPILER IS DETERMINED BY THE               00015001
*        OPERATOR PAIR STACK-SOURCE OPERATOR AND THE CURRENT           00016001
*        CONTEXT. THE OPERATOR PAIR DETERMINES AN ELEMENT IN A         00017001
*        DECISION MATRIX, WHICH IS DETERMINED BY THE CONTEXT. THE      00018001
*        MATRIX ELEMENTS REPRESENT ADDRESSES OF THE COMPILER           00019001
*        PROGRAMS, WHICH PERFORM THE ACTIONS REQUESTED BY ALL          00020001
*        POSSIBLE OPERATOR PAIRS.                                      00021001
*                                                                      00022001
*        THERE ARE THREE CONTEXTS, PROGRAM, STATEMENT, AND             00023001
*        EXPRESSION CONTEXT, AND THE CURRENT CONTEXT IS INDICATED      00024001
*        BY A REGISTER. SWITCHING ING FROM ONE CONTEXT TO              00025001
*        ANOTHER IS IN MOST CASES DETERMINED BY THE STACK-SOURCE       00026001
*        OPERATOR PAIR, IE THE COMPILER PROGRAM ACTIVATED JUST         00027001
*        PERFORMS THE CHANGE OF CONTEXT, BUT IN A FEW CASES THE        00028001
*        SOURCE OPERATOR ALONE DETERMINES THE NEW CONTEXT. IN          00029001
*        THIS LATTER CASE THE OPERATOR IS STACKED TOGETHER WITH A      00030001
*        CONTEXT OPERATOR, INDICATING THE PRECEDING CONTEXT.           00031001
*                                                                      00032001
*        BESIDES THE COMPILER PROGRAMS THERE ARE OTHER ROUTINES        00033001
*        PROVIDING DIFFERENT SERVICES. THE MOST IMPORTANT ARE          00034001
*        (THOSE MARKED WITH * ARE USED AS SUBROUTINES BY THE           00035001
*        COMPILER PROGRAMS) -                                          00036001
*                                                                      00037001
*        SUBSTART - SCAN TO NEXT OPERATOR IN SOURCE PROGRAM            00038001
*        COMP     - CHOOSE COMPILER PROGRAM AND BRANCH                 00039001
*        JBUFFER  - READ A NEW SOURCE PROGRAM RECORD                   00040001
*       *NXTOPT   - GET NEXT ENTRY OF OPTAB                            00041001
*       *SERR     - GENERATE AN ERROR PATTERN                          00042001
*        CPEND    - NORMAL TERMINATION                                 00043001
*        CPERRI   - ABNORMAL TERMINATION                               00044001
*       *GENERATE - GENERATE TXT AND RLD RECORDS                       00045001
*                                                                      00046001
*        A COMPILER PROGRAM IS ALWAYS FOLLOWED BY SUBSTART OR COMP     00047001
*        OR A BRANCH TO ANOTHER COMPILER PROGRAM                       00048001
*                                                                      00049001
*        THE MODULE CONSISTS OF SEVEN CONTROL SECTIONS                 00050001
*        IEX50000 - INITIALIZATION AND SUBROUTINES                     00051001
*        IEX50001 - DECISION MATRIXES                                  00052001
*        IEX50002 - COMPILER PROGRAMS HANDLING FOR STATEMENTS          00053001
*                   AND SUBSCRIPT OPTIMIZATION                         00054001
*        IEX50003 - COMPILER PROGRAMS HANDLING BEGIN AND END OF        00055001
*                   COMPOUND STATEMENTS AND BLOCKS, PROCEDURE          00056001
*                   DECLARATIONS, ARRAY DECLARATIONS, SWITCH           00057001
*                   DECLARATIONS, GOTO STATEMENTS, SUBSCRIPTED         00058001
*                   VARIABLES AND SWITCH DESIGNATORS, SEMICOLON        00059001
*                   COUNTER                                            00060001
*        IEX50004 - COMPILER PROGRAMS HANDLING ASSIGNMENTS,            00061001
*                   PROCEDURE CALLS, STANDARD PROCEDURE CALLS          00062001
*        IEX50005 - COMPILER PROGRAMS HANDLING ERRONEOUS CASES,        00063001
*                   BOOLEAN OPERATIONS, ARITHMETIC MINUS, IF,          00064001
*                   THEN, ELSE                                         00065001
*        IEX50006 - COMPILER PROGRAM HANDLING ARITHMETICAL             00066001
*                   OPERATIONS                                         00067001
*                                                                      00068001
*        ENTRY POINT -                                                 00069001
*        IEX50000 - COMPILATION PHASE XCTL EP=IEX50                    00070001
*        THE MODULE IS ENTERED FROM IEX40                              00071001
*                                                                      00072001
*        INPUT -                                                       00073001
*        THE SOURCE PROGRAM IS READ FROM SYSUT2                        00074001
*        OPTAB IS READ FROM SYSUT3                                     00075001
*                                                                      00076001
*        OUTPUT -                                                      00077001
*                                                                      00078001
*        THE MAIN PART OF THE OBJECT MODULE IS OUTPUT TO SYSLIN        00079001
*        AND/ OR SYSPUNCH IF THE OPTIONS 'LOAD' AND/OR 'DECK' ARE      00080001
*        SPECIFIED                                                     00081001
*                                                                      00082001
*        EXTERNAL ROUTINES - N/A                                       00083001
*                                                                      00084001
*        EXIT - NORMAL -                                               00085001
*        IF NO TERMINATING ERROR HAS OCCURRED, CONTROL IS GIVEN        00086001
*        TO THE TERMINATING MODULE BY MEANS OF XCTL EP=IEX51000        00087001
*                                                                      00088001
*        EXIT - ERROR -                                                00089001
*        IF A TERMINATING ERROR HAS OCCURED, CONTROL IS GIVEN TO       00090001
*        THE TERMINATING MODULE BY MEANS OF XCTL EP=IEX51ER1           00091001
*                                                                      00092001
*        TABLES/WORKAREAS -                                            00093001
*        SCPTAB  - COMPILER PROGRAM ADDR TABLE USED BY ROUTINE         00094001
*                  COMP                                                00095001
*        TXTT    - INFORMATION FOR TXT RECORDS USED BY ROUTINE         00096001
*                  GENERATE                                            00097001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     98 *        RLDT     - INFORMATION FOR RLD RECORDS USED BY ROUTINE          00098001
                                     99 *                   GENERATE                                              00099001
                                    100 *        DECAREA - DECISION MATRIXES USED BY ROUTINE COMP                00100001
                                    101 *                                                                         00101001
                                    102 *        THE PART OF COMMON WORKAREA STARTING AT SYSUT1 IS               00102001
                                    103 *        INITIALIZED BY THE PRECEDING LOAD MODULE AND USED BY            00103001
                                    104 *        THIS AND THE NEXT LOAD MODULE                                   00104001
                                    105 *                                                                         00105001
                                    106 *        THIS MODULE IS ONLY INTENDED TO BE EXECUTED IN                  00106001
                                    107 *        CONNECTION WITH THE OTHER MODULES OF THE ALGOL COMPILER         00107001
                                    108 *        IN PARTICULAR IT REQUIRES THE COMMON WORKAREA                   00108001
                                    109 *                                                                         00109001
000000                00000 06286   110 IEX50000 CSECT                                                            00110001
                                    111 *                                                                         00111001
                                    112 *        R6                             REL ADDR IN OBJ PROGRAM          00112001
                                    113 *        R7                             DISP IN OBJECT TIME STACK        00113001
                                    114 *        R8                             SOURCE PROGRAM POINTER           00114001
                                    115 *        R9                             OPERAND STACK POINTER            00115001
                                    116 *        R10                            OPERATOR STACK POINTER           00116001
                                    117 *        R11                            INDICATES CURRENT CONTEXT        00117001
                                    118 *        R12                            BASE ADDR OF COMP PROGRAMS       00118001
                                    119 *                                                                         00119001
                                    120 *        OBJECT TIME REGISTER DEFINITIONS                                00120001
                                    121 *                                                                         00121001
                      00000         122 FPR0     EQU   0                        *                                00122001
                      00002         123 FPR2     EQU   2                        *                                00123001
                      00003         124 GPRA     EQU   3                        *    VARIABLE USE                00124001
                      00005         125 GPRB     EQU   5                        *                                00125001
                      00006         126 GPRC     EQU   6                        *                                00126001
                      00008         127 ADR      EQU   8                        FOR TRANSFER OF ADDRS            00127001
                      0000A         128 CDSA     EQU   10                       ADDRS CURRENT DSA                00128001
                      00009         129 GDSA     EQU   9                        ADDRS GLOBAL DSA                 00129001
                      0000B         130 PBT      EQU   11                       ADDRS PROGRAM BLOCK TABLE        00130001
                      0000C         131 LAT      EQU   12                       ADDRS LABEL ADDR TABLE (LAT)     00131001
                      0000D         132 FSA      EQU   13                       ADDRS FIXED STORAGE AREA         00132001
                      0000F         133 ENTRY    EQU   15                       ENTRY PT OF LIBRARY SUBRTNS      00133001
                      0000F         134 BRR      EQU   15                       LINK REGISTER                    00134001
                                    135 *                                                                         00135001
                                    136 *        INITIALIZATION                                                  00136001
                                    137 *                                                                         00137001
                                    138 *        THIS ROUTINE PERFORMS THE REMAINING INITIALIZATION              00138001
                                    139 *        THE MAIN PART IS MADE IN IEX40001                               00139001
                                    140 *                                                                         00140001
                                    141          IEXENTRY 'IEX50000 LEVEL 2.1 &SYSDATE &SYSTIME'                  00141001
                                    142+*                                                                         01-IEXEN
000000 47F0 F026            00026   143+         B     38(,R15)             BRANCH AROUND ID                      01-IEXEN
000004 21                           144+         DC    AL1(33)              LENGTH OF IDENTIFIER                  01-IEXEN
000005 C9C5E7F5F0F0F0F0             145+         DC    CL33'IEX50000 LEVEL 2.1 08/17/12 13.13'                   +01-IEXEN
                                      +                                               IDENTIFIER                  01-IEXEN
                                    146 *                                                                         00142001
                 R:F  00000         147          USING IEX50000,R15             USE ENTRY POINT REG AS BASE      00143001
                 R:D  00000         148          USING WORKAREA,R13                                               00144001
000026 4150 F048            00048   149          LA    R5,SUBSTART              LOAD BASE REG FOR SUBSTART       00145001
                                    150          DROP  R15                                                        00146001
                 R:5  00048         151          USING SUBSTART,R5                                                00147001
00002A 4140 541A            00462   152          LA    R4,CPERR1                PROVIDE DIRECTORY                00148001
00002E 5040 D090            00090   153          ST    R4,ERET                  RETURN ADDR                      00149001
000032 58B0 5194            001DC   154          L     R11,DECAADD              LOAD ADDR OF CCT                 00150001
000036 4140 50CA            00112   155          LA    R4,JB3                   PROVIDE                          00151001
00003A 5040 D074            00074   156          ST    R4,EODUT2                EOD ADDR                         00152001
00003E 4140 514E            00196   157          LA    R4,NX4                   FOR UT2                          00153001
000042 5040 D078            00078   158          ST    R4,EODUT3                AND UT3                          00154001
000046 0700                         159          CNOP  0,8                                                        00155001
                                    160 *                                                                         00156001
                                    161 *        START OF SUBROUTINE POOL                                        00157001
                                    162 *                                                                         00158001
                                    163 *        SCAN SOURCE INPUT TO NEXT OPERATOR                              00159001
                                    164 *                                                                         00160001
000048 94FE D080      00080         165 SUBSTART NI    COMPFLGS,255-OPERAND     OPERAND FLAG OFF                 00161001
00004C 952F 8001      00001         166 ABC1     CLI   1(R8),XFZETA             TEST SOURCE                      00162001
000050 4740 5018            00060   167          BL    ABD3                     OPERATOR                         00163001
000054 4720 5020            00068   168          BH    ABD1                     OPERAND                          00164001
000058 4540 5084            000CC   169          BAL   R4,JBUFFER               BUFFER CHANGE                    00165001
00005C 47F0 5004            0004C   170          B     ABC1                     CONTINUE                         00166001
                                    171 *                                                                         00167001
000060 4180 8001            00001   172 ABD3     LA    R8,1(,R8)                INCR SOURCE PTR                  00168001
000064 47F0 5060            000A8   173          B     COMP                     CHOOSE CP                        00169001
                                    174 *                                                                         00170001
000068 9601 D080      00080         175 ABD1     OI    COMPFLGS,OPERAND         OPERAND FLAG ON                  00171001
00006C 4B90 5170            001B8   176          SH    R9,KH5                   SOURCE OPERAND                   00172001
000070 19A9                         177          CR    R10,R9                   TO                               00173001
000072 47B0 53E0            00428   178          BNL   STACKOFL                 STACK                            00174001
000076 D204 9000 8001 00000 00001   179          MVC   0(5,R9),1(R8)                                              00175001
00007C 4180 8005            00005   180          LA    R8,5(,R8)                SOURCE REG INCREASE              00176001
000080 47F0 5004            0004C   181          B     ABC1                     CONTINUE                         00177001
                                    182 *                                                                         00178001
                                    183 *        AN OPERAND IS NOT ALLOWED IN SOURCE                             00179001
                                    184 *                                                                         00180001
000084 952F 8001      00001         185 SPECTEST CLI   1(R8),XFZETA             SPECIAL TEST                     00181001
000088 4740 5018            00060   186          BL    ABD3                     OPERATOR                         00182001
00008C 4720 5050            00098   187          BH    ABD5                     OPERAND                          00183001
000090 4540 5084            000CC   188          BAL   R4,JBUFFER               BUFFER CHANGE                    00184001
000094 47F0 503C            00084   189          B     SPECTEST                                                   00185001
                                    190 *                                                                         00186001
000098 4188 0006            00006   191 ABD5     LA    R8,6(R8)                 SOURCE REG INCREASE              00187001
00009C 4540 5318            00360   192          BAL   R4,SERR3                                                   00188001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0000A0 00BF                         193 ERROR    DC    H'191'                                            00189001
                                    194 *                                                                00190001
0000A2 0680                         195          BCTR  R8,0                   SOURCE PTR MINUS ONE       00191001
0000A4 47F0 503C            00084   196          B     SPECTEST                                          00192001
                                    197 *                                                                00193001
                                    198 *        CHOOSE CP PROGRAM                                       00194001
                                    199 *                                                                00195001
0000A8 1B11                         200 COMP     SR    R1,R1                                             00196001
0000AA 1821                         201          LR    R2,R1                                             00197001
0000AC 4310 8000            00000   202          IC    R1,0(,R8)              FETCH SOURCE OPERATOR      00198001
0000B0 4311 B000            00000   203          IC    R1,0(R1,R11)           COLUMN VECTOR              00199001
0000B4 4320 A000            00000   204          IC    R2,0(,R10)             FETCH STACK OPERATOR       00200001
0000B8 4322 B032            00032   205          IC    R2,50(R2,R11)          ROW VECTOR                 00201001
0000BC 1A12                         206          AR    R1,R2                                             00202001
0000BE 4311 B064            00064   207          IC    R1,100(R1,R11)                                    00203001
0000C2 8910 0002            00002   208          SLL   R1,2(0)                COMPILER PROGRAM FROM MATRIX    00204001
0000C6 58C1 51A4            001EC   209          L     R12,SCPTAB(R1)         FIND BASE ADDR             00205001
0000CA 07FC                         210          BR    R12                    BRANCH TO COMPILER PROGRAM 00206001
                                    211 *                                                                00207001
                                    212 ********************************************************************** 00208001
                                    213 *                                                                00209001
                                    214 *        JBUFFER - READ INPUT BUFFER                             00210001
                                    215 *                                                                00211001
                                    216 ********************************************************************** 00212001
                                    217 *                                                                00213001
                                    218 * CALL   BAL   R4,JBUFFER             (FROM SUBSTART)            00214001
                                    219 *        BAL   R4,JBUFFER             (FROM COMPILER PROGRAMS)   00215001
                                    220 *                                                                00216001
                                    221 *        REGISTER DEFINITIONS                                    00217001
                                    222 *                                                                00218001
                                    223 *        R3                           SYSUT2 DCB                 00219001
                                    224 *        R2                           ADDR OF CURRENT BUFFER     00220001
                                    225 *        R8                           ADDR OF CURRENT INPUT BUFFER    00221001
                                    226 *                                                                00222001
0000CC 5830 D068            00068   227 JBUFFER  L     R3,AUT2DCB             R2 -> SYSUT2 DCB           00223001
0000D0 5820 D600            00600   228          L     R2,SOURCEB             GET ADDR OF CURRENT BUFFER 00224001
0000D4 47F0 50A0            000E8   229 JB1      B     JB2                    NO CHECK FIRST TIME        00225001
                                    230 *                                                                00226001
                                    231          CHECK SRCECO                 CHECK PREVIOUS READ        00227001
0000D8 4110 50A4            000EC   232+         LA    1,SRCECO                         LOAD PARAMETER REG 1  02-IHBIN
0000DC 58E0 1008            00008   233+         L     14,8(0,1)               PICK UP DCB ADDR          01-CHECK
0000E0 58F0 E034            00034   234+         L     15,52(0,14)             LOAD CHECK ROUTINE ADDR   01-CHECK
0000E4 05EF                         235+         BALR  14,15                   LINK TO CHECK ROUTINE     01-CHECK
                                    236 *                                                                00228001
                                    237 JB2      READ  SRCECO,SF,(R3),(R2)                               00229001
0000E6 0700                         238+         CNOP  0,4                                               02-IHBRD
0000E8 4510 50B8            00100   239+JB2      BAL   1,*+24                  LOAD DECB ADDRESS         02-IHBRD
0000EC 00000000                     240+SRCECO   DC    F'0'                             EVENT CONTROL BLOCK   02-IHBRD
0000F0 00                           241+         DC    X'00'                            TYPE FIELD       02-IHBRD
0000F1 80                           242+         DC    X'80'                            TYPE FIELD       02-IHBRD
0000F2 0000                         243+         DC    AL2(0)                           LENGTH           02-IHBRD
0000F4 00000000                     244+         DC    A(0)                             DCB ADDRESS      02-IHBRD
0000F8 00000000                     245+         DC    A(0)                             AREA ADDRESS     02-IHBRD
0000FC 00000000                     246+         DC    A(0)                             RECORD POINTER WORD   02-IHBRD
000100 5031 0008            00008   247+         ST    R3,8(1,0)                        STORE DCB ADDRESS     02-IHBRD
000104 5021 000C            0000C   248+         ST    R2,12(1,0)                       STORE AREA ADDRESS    02-IHBRD
000108 58F1 0008            00008   249+         L     15,8(1,0)           LOAD DCB ADDRESS              02-IHBRD
00010C 58F0 F030            00030   250+         L     15,48(0,15)                      LOAD RDWR ROUTINE ADDR 02-IHBRD
000110 05EF                         251+         BALR  14,15                            LINK TO RDWR ROUTINE  02-IHBRD
                                    252 *                                                                00230001
000112 5880 D604            00604   253 JB3      L     R8,RSRCB               GET ADDR OF OLD READ BUFFER     00231001
000116 5020 D604            00604   254          ST    R2,RSRCB               CHANGE ADDRS               00232001
00011A 5080 D600            00600   255          ST    R8,SOURCEB                                        00233001
00011E 0680                         256          BCTR  R8,0                   GET START ADDR - 1         00234001
000120 4330 DA59            00A59   257          IC    R3,NUMBBL              STEP                       00235001
000124 4130 3001            00001   258          LA    R3,1(,R3)                   RECORD                00236001
000128 4230 DA59            00A59   259          STC   R3,NUMBBL                          COUNTER        00237001
00012C 9200 508D      000D5         260          MVI   JB1+1,X'00'            CHANGE BRANCH CONDITION    00238001
000130 07F4                         261          BR    R4                     RETURN                     00239001
                                    262 *                                                                00240001
                                    263 ********************************************************************** 00241001
                                    264 *                                                                00242001
                                    265 *        NXTOPT - ACQUIRES NEXT ENTRY OF OPTAB                   00243001
                                    266 *                                                                00244001
                                    267 ********************************************************************** 00245001
                                    268 *                                                                00246001
                                    269 * CALL   BAL   R4,NXTOPT                                         00247001
                                    270 *                                                                00248001
000132 5820 D610            00610   271 NXTOPT   L     R2,OPBUFB              GET ADDR OF CURRENT BUFFER 00249001
000136 5830 5168            001B0   272          L     R3,OPREL               GET REL ADDR OF NEW ENTRY  00250001
00013A 4130 300E            0000E   273          LA    R3,14(,R3)                                        00251001
00013E 5930 D0FC            000FC   274          C     R3,OPTABS              A NEW BUFFER REQUIRED ?    00252001
000142 47B0 5108            00150   275          BNL   NX1                    YES                        00253001
000146 1A23                         276          AR    R2,R3                  NO, STORE                  00254001
000148 5020 D618            00618   277          ST    R2,AOPTABE             ADDR OF NEW ENTRY          00255001
00014C 47F0 5160            001A8   278          B     NX3                                               00256001
                                    279 *                                                                00257001
000150 47F0 511A            00162   280 NX1      B     NX2                    NO CHECK FIRST TIME        00258001
                                    281 *                                                                00259001
                                    282          CHECK OPTCO                  CHECK PREVIOUS READ        00260001
000154 4110 5124            0016C   283+         LA    1,OPTCO                          LOAD PARAMETER REG 1  02-IHBIN
000158 58E0 1008            00008   284+         L     14,8(0,1)               PICK UP DCB ADDR          01-CHECK
00015C 58F0 E034            00034   285+         L     15,52(0,14)             LOAD CHECK ROUTINE ADDR   01-CHECK
000160 05EF                         286+         BALR  14,15                   LINK TO CHECK ROUTINE     01-CHECK
                                    287 *                                                                00261001
000162 5830 D06C            0006C   288 NX2      L     R3,AUT3DCB             R3 -> SYSUT3 DCB           00262001
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  Active USINGs: IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

                                    289 *                                                                   00263001
                                    290         READ  OPTCO,SF,(R3),(R2),'S'  READ OPTAB RECORD             00264001
000166 0700                         291+        CNOP  0,4                                                   02-IHBRD
000168 4510 5138            00180   292+        BAL   1,*+24                   LOAD DECB ADDRESS            02-IHBRD
00016C 00000000                     293+OPTCO   DC    F'0'                              EVENT CONTROL BLOCK 02-IHBRD
000170 80                           294+        DC    X'80'                             TYPE FIELD          02-IHBRD
000171 80                           295+        DC    X'80'                             TYPE FIELD          02-IHBRD
000172 0000                         296+        DC    AL2(0)                            LENGTH              02-IHBRD
000174 00000000                     297+        DC    A(0)                              DCB ADDRESS         02-IHBRD
000178 00000000                     298+        DC    A(0)                              AREA ADDRESS        02-IHBRD
00017C 00000000                     299+        DC    A(0)                              RECORD POINTER WORD 02-IHBRD
000180 5031 0008            00008   300+        ST    R3,8(1,0)                         STORE DCB ADDRESS   02-IHBRD
000184 5021 000C            0000C   301+        ST    R2,12(1,0)                        STORE AREA ADDRESS  02-IHBRD
000188 58F1 0008            00008   302+        L     15,8(1,0)              LOAD DCB ADDRESS               02-IHBRD
00018C 58F0 F030            00030   303+        L     15,48(0,15)                       LOAD RDWR ROUTINE ADDR 02-IHBRD
000190 05EF                         304+        BALR  14,15                             LINK TO RDWR ROUTINE 02-IHBRD
                                    305 *                                                                   00265001
000192 9200 5109      00151         306         MVI   NX1+1,X'00'             CHANGE BRANCH CONDITION       00266001
000196 5810 D614            00614   307 NX4     L     R1,ROPTB                GET ADDR OF OLD READ BUFFER   00267001
00019A 5010 D610            00610   308         ST    R1,OPBUF                CHANGE                        00268001
00019E 5020 D614            00614   309         ST    R2,ROPTB                       ADDRS                  00269001
0001A2 5010 D618            00618   310         ST    R1,AOPTABE              STORE                         00270001
0001A6 1B33                         311         SR    R3,R3                         ADDRS OF                00271001
0001A8 5030 5168            001B0   312 NX3     ST    R3,OPREL                                NEW ENTRY     00272001
0001AC 07F4                         313         BR    R4                      RETURN                        00273001
                                    314 *                                                                   00274001
0001AE 0000
0001B0 00000000                     315 OPREL   DC    F'0'                    REL ADDR IN CURRENT BUFFER    00275001
                                    316 *                                                                   00276001
                                    317 *       CONSTANTS LOCATED IN SUBROUTINE POOL                        00277001
                                    318 *                                                                   00278001
0001B4 0002                         319 KH2     DC    H'2'                                                  00279001
0001B6 0004                         320 KH4     DC    H'4'                                                  00280001
0001B8 0005                         321 KH5     DC    H'5'                                                  00281001
0001BA 0008                         322 KH8     DC    H'8'                                                  00282001
0001BC 0009                         323 KH9     DC    H'9'                                                  00283001
0001BE 000A                         324 KH10    DC    H'10'                                                 00284001
0001C0 000F                         325 KH15    DC    H'15'                                                 00285001
0001C2 0014                         326 KH20    DC    H'20'                                                 00286001
0001C4 0122                         327 KH290   DC    H'290'                                                00287001
0001C6 0144                         328 KH324   DC    H'324'                                                00288001
0001C8 0266                         329 KH614   DC    H'614'                                                00289001
0001CA 91FF01000000                 330 API     DC    X'91FF01000000'                                       00290001
                                    331 *                                                                   00291001
0001D0 00000003                     332 TYPETEST DC   F'3'                                                  00292001
0001D4 0000                         333 SWVAL   DC    H'0'                                                  00293001
0001D6 0000                         334 SWREL   DC    H'0'                                                  00294001
0001D8 0000                         335 GREGN   DC    H'0'                                                  00295001
0001DA 0000
0001DC                              336         DC    0F'0'                                                 00296001
0001DC 00000F8C                     337 DECAADD DC    A(DECAREA)               ADDR OF DECISION AREA        00297001
                                    338 *                                      ADDR OF PROG CONTEXT COL VECTOR 00298001
0001E0 00000FFF                     339 HEXFFF  DC    X'00000FFF'                                           00299001
0001E4 000010AE                     340 STC     DC    A(ADRSTC)                ADDR OF STMT CONTEXT COL VECTOR 00300001
0001E8 000011F2                     341 EXC     DC    A(ADREXC)                ADDR OF EXPR CONTEXT COL VECTOR 00301001
                                    342 *                                                                   00302001
                                    343 ********************************************************************* 00303001
                                    344 *                                                                   00304001
                                    345 *       COMPILER PROGRAM ADDR TABLE                                 00305001
                                    346 *                                                                   00306001
                                    347 ********************************************************************* 00307001
                                    348 *                                                                   00308001
0001EC                              349         DC    0F'0'                                                 00309001
0001EC 0000233E000023A8             350 SCPTAB  DC    A(CP0,CP1,CP84,CP3)                                   00310001
0001FC 0000241C000042F4             351         DC    A(CP4,CP84,CP6,CP7)                                   00311001
00020C 00002618000042F4             352         DC    A(CP8,CP84,CP84,CP84)                                 00312001
00021C 0000330E000042F4             353         DC    A(CP12,CP84,CP84,CP84)                                00313001
00022C 00002646000042FE             354         DC    A(CP16,CP17,CP18,CP19)                                00314001
00023C 000033B8000035E8             355         DC    A(CP20,CP21,CP22,CP23)                                00315001
00024C 000027020000271A             356         DC    A(CP24,CP25,CP26,CP27)                                00316001
00025C 00004586000045C4             357         DC    A(CP28,CP29,CP30,CP31)                                00317001
00026C 000042F400003656             358         DC    A(CP84,CP33,CP34,CP84)                                00318001
00027C 0000273A000042F4             359         DC    A(CP36,CP84,CP38,CP84)                                00319001
00028C 0000139200002B54             360         DC    A(CP40,CP41,CP84,CP43)                                00320001
00029C 000042F4000016A4             361         DC    A(CP84,CP45,CP84,CP47)                                00321001
0002AC 000042F400001BE6             362         DC    A(CP84,CP49,CP84,CP51)                                00322001
0002BC 00002FC0000042F4             363         DC    A(CP52,CP84,CP54,CP84)                                00323001
0002CC 0000305A0000365E             364         DC    A(CP56,CP57,CP84,CP59)                                00324001
0002DC 000042F40000397C             365         DC    A(CP84,CP61,CP62,CP63)                                00325001
0002EC 0000418C00004718             366         DC    A(CP64,CP65,CP66,CP67)                                00326001
0002FC 000047A4000052A2             367         DC    A(CP68,CP69,CP70,CP71)                                00327001
00030C 000047B8000047D8             368         DC    A(CP72,CP73,CP74,CP75)                                00328001
00031C 0000484A00004A9A             369         DC    A(CP76,CP77,CP78,CP79)                                00329001
00032C 000050260001D48              370         DC    A(CP80,CP81,CP84,CP83)                                00330001
00033C 000042F4000032B8             371         DC    A(CP84,CP85,CP86,CP87)                                00331001
                                    372 *                                                                   00332001
                                    373 *       NON EXISTANT COMPILER PROGRAMS                              00333001
                                    374 *                                                                   00334001
                                    375 *       CP2,  CP5,  CP9,  CP10, CP11, CP13, CP14, CP15, CP32,       00335001
                                    376 *       CP35, CP37, CP39, CP42, CP44, CP46, CP48, CP50, CP53,       00336001
                                    377 *       CP55, CP58, CP60, CP82                                      00337001
                                    378 *                                                                   00338001
                                    379 ********************************************************************* 00339001
                                    380 *                                                                   00340001
                                    381 *       ERROR PATTERN GENERATION                                    00341001
                                    382 *                                                                   00342001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                         X390 3.1.04  2012/08/17 13.13

                                      383 ********************************************************************** 00343001
                                      384 *                                                                     00344001
                                      385 * CALL    BAL    R4,SERRX              X=1, 2, 3, 4, SP               00345001
                                      386 *         DC     H'N'                  N=MSG NUMBER                   00346001
                                      387 *                                                                     00347001
                                      388 *         ENTRY BOTH OPERATORS                                        00348001
                                      389 *                                                                     00349001
00034C 4130 0002            00002     390 SERR4     LA     R3,2                                                 00350001
000350 4120 0006            00006     391           LA     R2,6                   GET LENGTH OF ENTRY           00351001
000354 47F0 5320            00368     392           B      ER2                                                  00352001
                                      393 *                                                                     00353001
                                      394 *         ENTRY STACK OPERATOR                                        00354001
                                      395 *                                                                     00355001
000358 4130 0003            00003     396 SERR2     LA     R3,3                                                 00356001
00035C 47F0 531C            00364     397           B      ER1                                                  00357001
                                      398 *                                                                     00358001
                                      399 *         ENTRY SOURCE OPERATOR                                       00359001
                                      400 *                                                                     00360001
000360 4130 0001            00001     401 SERR3     LA     R3,1                                                 00361001
000364 4120 0005            00005     402 ER1       LA     R2,5                  GET LENGTH OF ENTRY            00362001
000368 58F0 D0C0            000C0     403 ER2       L      R15,NEXTERR           GET ADDR OF POOL ENTRY         00363001
00036C 4220 F000            00000     404           STC    R2,0(,R15)            INSERT LENGTH OF ENTRY         00364001
000370 4120 0004            00004     405           LA     R2,4                  SET POINTER FOR OPERATOR INSERT 00365001
000374 4630 5342            0038A     406           BCT    R3,ER4                BRANCH IF STACK OR BOTH        00366001
                                      407 *                                                                     00367001
000378 D200 53D1 8000 00419 00000     408 ER3       MVC    EP212+3(1),0(R8)      GET SOURCE OP                  00368001
00037E 9680 53D1      00419           409           OI     EP212+3,X'80'         PUT A TAG                      00369001
000382 4310 53D1            00419     410           IC     R1,EP212+3            INSERT SOURCE OPERATOR         00370001
000386 47F0 5346            0038E     411           B      ER5                                                  00371001
                                      412 *                                                                     00372001
00038A 4310 A000            00000     413 ER4       IC     R1,0(,R10)            FETCH STACK OPERATOR           00373001
00038E 4212 F000            00000     414 ER5       STC    R1,0(R2,R15)          INSERT OPERATOR                00374001
000392 4120 2001            00001     415           LA     R2,1(,R2)             INCREASE POINTER               00375001
000396 4630 538C            003D4     416           BCT    R3,ER6                STACK OR SOURCE, BRANCH        00376001
00039A 47F0 5330            00378     417           B      ER3                   BOTH                           00377001
                                      418 *                                                                     00378001
                                      419 *         SPECIAL ENTRY FOR MSG 214                                   00379001
                                      420 *                                                                     00380001
00039E 58F0 D0C0            000C0     421 SERRSP    L      R15,NEXTERR           GET ADDR OF POOL ENTRY         00381001
0003A2 4830 DA5C            00A5C     422           LH     R3,SPBNST             GET CURRENT PBN                00382001
0003A6 4E30 53D8            00420     423           CVD    R3,ERDOUBLE           BINARY                         00383001
0003AA F321 53D8 53DE 00420 00426     424           UNPK   ERDOUBLE(3),ERDOUBLE+6(2)     TO                     00384001
0003B0 D300 53DA 53D8 00422 00420     425           MVZ    ERDOUBLE+2(1),ERDOUBLE            CHARACTER          00385001
0003B6 D202 F004 53D8 00004 00420     426           MVC    4(3,R15),ERDOUBLE     MOVE TO ERROR PATTERN          00386001
0003BC 4120 0007            00007     427           LA     R2,7                  SET LENGTH OF ENTRY            00387001
0003C0 4220 F000            00000     428           STC    R2,0(,R15)                                           00388001
0003C4 47F0 538C            003D4     429           B      ER6                                                  00389001
                                      430 *                                                                     00390001
                                      431 *         ENTRY NO OPERATOR                                           00391001
                                      432 *                                                                     00392001
0003C8 58F0 D0C0            000C0     433 SERR1     L      R15,NEXTERR                                          00393001
0003CC 4120 0004            00004     434           LA     R2,4                  INSERT LENGTH OF ENTRY         00394001
0003D0 4220 F000            00000     435           STC    R2,0(,R15)                                           00395001
0003D4 D201 F002 D09C 00002 0009C     436 ER6       MVC    2(2,R15),SEMCNT       INSERT SEMICOLON COUNTER       00396001
0003DA 4330 4001            00001     437           IC     R3,1(,R4)             INSERT ERROR NUMBER            00397001
0003DE 4230 F001            00001     438           STC    R3,1(,R15)                                           00398001
0003E2 41F2 F000            00000     439           LA     R15,0(R2,R15)         UPDATE PTR TO NEXT ENTRY       00399001
0003E6 50F0 D0C0            000C0     440           ST     R15,NEXTERR                                          00400001
0003EA 59F0 D0C4            000C4     441           C      R15,ENDPOOL           POOL FULL ?                    00401001
0003EE 47D0 53C2            0040A     442           BNH    ER7                   NO                             00402001
0003F2 D201 53D0 D09C 00418 0009C     443           MVC    EP212+2(2),SEMCNT     YES, MOVE PATTERN FOR M212     00403001
0003F8 D203 F000 53CE 00000 00416     444           MVC    0(4,R15),EP212                                       00404001
0003FE 41F0 F004            00004     445           LA     R15,4(0,R15)          UPDATE PTR TO NEXT ENTRY       00405001
000402 50F0 D0C0            000C0     446           ST     R15,NEXTERR                                          00406001
000406 47F0 541A            00462     447           B      CPERR1                GOTO TERMINATION               00407001
                                      448 *                                                                     00408001
00040A 9680 D080      00080           449 ER7       OI     COMPFLGS,COMPMODE     SET SYNTAX CHECK MODE          00409001
00040E 4130 0002            00002     450           LA     R3,2                  STEP RETURN ADDR               00410001
000412 1A43                           451           AR     R4,R3                                                00411001
000414 07F4                           452           BR     R4                    R4 TO CALLER                   00412001
                                      453 *                                                                     00413001
000416 04D40000                       454 EP212     DC     X'04D40000'           ERROR PATTERN FOR MSG 212      00414001
00041A 000000000000
000420 0000000000000000               455 ERDOUBLE DC      D'0'                                                 00415001
                                      456 *                                                                     00416001
                                      457 *         OPERAND/OPERATOR STACK OVERFLOW                             00417001
                                      458 *                                                                     00418001
                                      459 * CALL    B STACKOFL                                                  00419001
                                      460 *                                                                     00420001
000428 4540 5380            003C8     461 STACKOFL BAL     R4,SERR1                                             00421001
00042C 00BA                           462           DC     H'186'                                               00422001
                                      463 *                                                                     00423001
00042E 47F0 541A            00462     464           B      CPERR1                                               00424001
                                      465 *                                                                     00425001
                                      466 *         NORMAL TERMINATION                                          00426001
                                      467 *                                                                     00427001
000432 9140 D082      00082           468 CPEND     TM     COMPFLGS+2,SPIC       SOURCE IN STORE ?              00428001
000436 4710 53F6            0043E     469           BO     CPEND1                YES                            00429001
00043A 4540 5084            000CC     470           BAL    R4,JBUFFER            NO, CHECK LAST READ            00430001
00043E 91F0 5109      00151           471 CPEND1    TM     NX1+1,X'F0'           OPTAB READ IN IEX50 ?          00431001
000442 4710 5402            0044A     472           BO     CPEND2                NO                             00432001
000446 4540 50EA            00132     473           BAL    R4,NXTOPT             NO, CHECK LAST READ            00433001
                                      474 *                                                                     00434001
                                      475 CPEND2    XCTL   EP=IEX51000           XCTL TO NEXT MODULE            00435001
00044A                                476+CPEND2    DS     0H                                                   01-XCTL
00044A 0700                           477+          CNOP   0,4                                                  02-IHBIN
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00044C 45F0 5418            00460   478+         BAL   15,*+20          BRANCH AROUND CONSTANTS            02-IHBIN
000450 00000458                     479+         DC    A(*+8)           ADDR. OF PARM. LIST                02-IHBIN
000454 00000000                     480+         DC    A(0)              DCB ADDRESS PARAMETER             02-IHBIN
000458 C9C5E7F5F1F0F0F0             481+         DC    CL8'IEX51000'     EP PARAMETER                      02-IHBIN
000460 0A07                         482+         SVC   7                              ISSUE XCTL SVC       01-XCTL
                                    483 *                                                                  00436001
                                    484 *        DIRECTORY RETURN ADDR                                     00437001
                                    485 *                                                                  00438001
000462 91F0 508D      000D5         486 CPERR1   TM    JB1+1,X'F0'           READ TO INPUT BUFFERS         00439001
000466 4710 5430            00478   487          BO    CPERR10               NO                            00440001
                                    488 *                                                                  00441001
                                    489          CHECK SRCECO                CHECK LAST READ               00442001
00046A 4110 50A4            000EC   490+         LA    1,SRCECO                        LOAD PARAMETER REG 1 02-IHBIN
00046E 58E0 1008            00008   491+         L     14,8(0,1)              PICK UP DCB ADDR             01-CHECK
000472 58F0 E034            00034   492+         L     15,52(0,14)            LOAD CHECK ROUTINE ADDR      01-CHECK
000476 05EF                         493+         BALR  14,15                  LINK TO CHECK ROUTINE        01-CHECK
                                    494 *                                                                  00443001
000478 91F0 5109      00151         495 CPERR10  TM    NX1+1,X'F0'           OPTAB READ                    00444001
00047C 4710 5446            0048E   496          BO    CPERR11               NO                            00445001
                                    497 *                                                                  00446001
                                    498          CHECK OPTCO                 CHECK LAST READ               00447001
000480 4110 5124            0016C   499+         LA    1,OPTCO                         LOAD PARAMETER REG 1 02-IHBIN
000484 58E0 1008            00008   500+         L     14,8(0,1)              PICK UP DCB ADDR             01-CHECK
000488 58F0 E034            00034   501+         L     15,52(0,14)            LOAD CHECK ROUTINE ADDR      01-CHECK
00048C 05EF                         502+         BALR  14,15                  LINK TO CHECK ROUTINE        01-CHECK
                                    503 *                                                                  00448001
                                    504 CPERR11  XCTL  EP=IEX51ER1           ERROR MSG EDITING AND TERM    00449001
00048E                              505+CPERR11  DS    0H                                                  01-XCTL
00048E 0700                         506+         CNOP  0,4                                                 02-IHBIN
000490 45F0 545C            004A4   507+         BAL   15,*+20          BRANCH AROUND CONSTANTS            02-IHBIN
000494 0000049C                     508+         DC    A(*+8)           ADDR. OF PARM. LIST                02-IHBIN
000498 00000000                     509+         DC    A(0)              DCB ADDRESS PARAMETER             02-IHBIN
00049C C9C5E7F5F1C5D9F1             510+         DC    CL8'IEX51ER1'     EP PARAMETER                      02-IHBIN
0004A4 0A07                         511+         SVC   7                              ISSUE XCTL SVC       01-XCTL
                                    512 *                                                                  00450001
0004A6                              513          DC    0H'0'                                               00451001
                                    514 *                                                                  00452001
                                    515 ********************************************************************** 00453001
                                    516 *                                                                  00454001
                                    517 *        CONVERSION - INTEGER TO REAL                              00455001
                                    518 *                                                                  00456001
                                    519 ********************************************************************** 00457001
                                    520 *                                                                  00458001
                                    521 *        GENERATES CALL OF CONVERSION ROUTINE FROM INTEGER TO      00459001
                                    522 *        REAL AFTER LOCATING THE OPERAND                           00460001
                                    523 *        RESERVES ONE OBJECT STACK TIME ENTRY                      00461001
                                    524 *        SETS RIR                                                  00462001
                                    525 *        INTRODUCES OPERAND ADDRS INTO RUTR                        00463001
                                    526 *        ADJUSTS OPERAND                                           00464001
                                    527 *                                                                  00465001
                                    528 * CALL   BAL   R4,TRINRE                                           00466001
                                    529 *                                                                  00467001
0004A6 5040 D578            00578   530 TRINRE   ST    R4,RETADR             STORE RETURN ADDR             00468001
0004AA 4140 54EE            00536   531          LA    R4,HQF21                                            00469001
0004AE 4530 5CB4            00CFC   532          BAL   R3,ROUTIN15                                         00470001
0004B2 1B11                         533          SR    R1,R1                                               00471001
0004B4 4319 0003            00003   534          IC    R1,3(R9)              PREPARE INSTRUCTION           00472001
0004B8 8810 0004            00004   535          SRL   R1,4                                                00473001
0004BC 4120 0001            00001   536          LA    R2,1                                                00474001
0004C0 8920 1000            00000   537          SLL   R2,0(R1)                                            00475001
0004C4 4220 5485            004CD   538          STC   R2,HQD2+1                                           00476001
0004C8 97FF 5485      004CD         539          XI    HQD2+1,X'FF'                                        00477001
0004CC 9400 DA47      00A47         540 HQD2     NI    RII+1,X'00'                                         00478001
0004D0 4540 5AF2            00B3A   541          BAL   R4,ROUTINE8           RELILO                        00479001
0004D4 D100 5497 DA72 004DF 00A72   542          MVN   HQG1+1(1),VPLACE                                    00480001
0004DA 4520 559E            005E6   543          BAL   R2,GENTXT2                                          00481001
0004DE 18E0                         544 HQG1     LR    R14,0                 ***GENERATE***                00482001
0004E0 9101 DA49      00A49         545 HQH1     TM    RIR+1,X'01'           FPRO FREE ?                   00483001
0004E4 4780 54A4            004EC   546          BZ    HQJ1                  YES, BRANCH                   00484001
0004E8 4540 5C64            00CAC   547          BAL   R4,ROUTIN14           STFPR0                        00485001
0004EC 9101 DA46      00A46         548 HQJ1     TM    RII,X'01'             ADR FREE ?                    00486001
0004F0 4780 54B0            004F8   549          BZ    HQJ11                                               00487001
0004F4 4540 5B46            00B8E   550          BAL   R4,ROUTIN10                                         00488001
0004F8 4520 55A2            005EA   551 HQJ11    BAL   R2,GENTXT4            CALL CONVERSION ROUTINE       00489001
                                    552 *        BAL   ADR,CNVIRD(0,FSA)     ***GENERATE***                00490001
0004FC 4580 D120            00120   553          BAL   R8,X'120'(,13)        ***NEW GENERATED ***          00491001
000500 9680 9000      00000         554          OI    0(R9),X'80'           ADJUST R9 ENTRY               00492001
000504 949F 9000      00000         555          NI    0(R9),X'9F'                                         00493001
000508 9632 9001      00001         556          OI    1(R9),X'32'                                         00494001
00050C 94FE 9001      00001         557          NI    1(R9),X'FE'                                         00495001
000510 D200 9002 DA5D 00002 00A5D   558          MVC   2(1,R9),SPBNST+1                                    00496001
000516 4A70 DA56            00A56   559          AH    R7,ONEENTRY           INCR OF 4(SHORT) OR 8(LONG)   00497001
00051A 4070 D5F8            005F8   560          STH   R7,WORKPL                                           00498001
00051E D201 9003 D5F8 00003 005F8   561          MVC   3(2,R9),WORKPL        INTRODUCE STACK ADDR          00499001
000524 5090 D5E4            005E4   562          ST    R9,RUTR               INTRODUCE R9 ADDR IN RUTR     00500001
000528 9601 DA49      00A49         563          OI    RIR+1,X'01'           SET RIR TO ONE                00501001
00052C 9200 DA45      00A45         564          MVI   CIR+1,0               CIR=0                         00502001
000530 5840 D578            00578   565          L     R4,RETADR             LOAD RETURN ADDR              00503001
000534 07F4                         566          BR    R4                                                  00504001
                                    567 *                                                                  00505001
000536 D100 54FF DA72 00547 00A72   568 HQF21    MVN   HQG2+1(1),VPLACE      PREPARE INSTRUCTION           00506001
00053C D201 5500 DA6A 00548 00A6A   569          MVC   HQG2+2(2),WPLACE                                    00507001
000542 4520 55A2            005EA   570          BAL   R2,GENTXT4                                          00508001
000546 58E0 0000            00000   571 HQG2     L     R14,0(0,0)            ***GENERATE***                00509001
00054A 47F0 5498            004E0   572          B     HQH1                                                00510001
                                    573 *                                                                  00511001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.13

                                      574 ********************************************************************** 00512001
                                      575 *                                                                      00513001
                                      576 *        CONVERSION - REAL TO INTEGER                                  00514001
                                      577 *                                                                      00515001
                                      578 ********************************************************************** 00516001
                                      579 *                                                                      00517001
                                      580 *        SUBROUTINE TO GENERATE CODE TO CALL REAL TO INTEGER           00518001
                                      581 *        CONVERSION ROUTINE                                            00519001
                                      582 *                                                                      00520001
                                      583 * CALL   BAL   R4,TRREIN                                               00521001
                                      584 *                                                                      00522001
                                      585 *        AT OBJECT TIME THE INTEGER VALUE IS IN R14 AFTER CONVERSION   00523001
                                      586 *                                                                      00524001
                                      587 *        BIT PATTERNS                                                  00525001
                                      588 *                                                                      00526001
                      000C0           589 OBJSTM   EQU   X'C0'                     OBJECT STACK MASK             00527001
                      00001           590 RADRFREM EQU   X'01'                     REG ADDR FREE MASK            00528001
                      00001           591 FPROOCM  EQU   X'01'                     FPR0 MASK                     00529001
                      00020           592 OPDVALUM EQU   X'20'                     VALUE MASK                    00530001
                      00040           593 OPDREGM  EQU   X'40'                     REGISTER MASK                 00531001
                                      594 *                                                                      00532001
00054E 5040 5570            005B8     595 TRREIN   ST    R4,SAVTRREI               SAVE RETURN ADDR              00533001
000552 9101 DA49      00A49           596          TM    RIR+1,FPROOCM             FPR0 OCCUPIED ?               00534001
000556 4780 5522            0056A     597          BZ    TRREIN1                   NO                            00535001
00055A 5990 D5E4            005E4     598          C     R9,RUTR                   OPERAND IN FPR0               00536001
00055E 4780 5568            005B0     599          BE    TRREIN8                   YES, RELEASE FPR0             00537001
000562 4540 5C64            00CAC     600          BAL   R4,ROUTIN14               STORE FPR0                    00538001
000566 94FE DA49      00A49           601          NI    RIR+1,255-FPROOCM         MARK FPR0 FREE                00539001
00056A 4130 555C            005A4     602 TRREIN1  LA    R3,TRREIN4                ADDR IF VALUE IN REG          00540001
00056E 4540 5CB4            00CFC     603          BAL   R4,ROUTIN15               FIND DISPL AND REG            00541001
000572 D100 553B DA72 00583 00A72     604 TRREIN2  MVN   TRREIN3+1(1),VPLACE       INSERT REGISTER AND           00542001
000578 D201 553C DA6A 00584 00A6A     605          MVC   TRREIN3+2(2),WPLACE       DISPLACEMENT IN LOAD INSTRUCTION 00543001
00057E 4520 5594            005DC     606          BAL   R2,GENTXTP4               GENERATE A LOAD FPR0          00544001
000582 6800 0000            00000     607 TRREIN3  LD    FPR0,0(0,0)               *INSTRUCTION, FLOATING POINT * 00545001
000586 9101 DA46      00A46           608 TRREIN6  TM    RII,RADRFREM              REG ADDR FREE                 00546001
00058A 4780 554E            00596     609          BZ    TRREIN9                   YES                           00547001
00058E 4540 5B46            00B8E     610          BAL   R4,ROUTIN10               STORE ADDR AND RETURN         00548001
000592 94FE DA46      00A46           611          NI    RII,255-RADRFREM                                        00549001
000596 4520 55A2            005EA     612 TRREIN9  BAL   R2,GENTXT4                GENERATE A CALL TO THE REAL-  00550001
                                      613 *        BAL   ADR,CNVRDI(FSA,0)         *INTEGER CONVERSION ROUTINE   00551001
00059A 458D 014C            0014C     614          BAL   8,X'14C'(13)              ***NEW GENERATED CODE***      00552001
00059E 5840 5570            005B8     615          L     R4,SAVTRREI                                             00553001
0005A2 07F4                           616          BR    R4                                                      00554001
                                      617 *                                                                      00555001
0005A4 D100 5567 DA72 005AF 00A72     618 TRREIN4  MVN   TRREIN5+1(1),VPLACE                                     00556001
0005AA 4520 5598            005E0     619          BAL   R2,GENTXTP2               GENERATE A LOAD  FPR0         00557001
0005AE 2800                           620 TRREIN5  LDR   FPR0,0                    *INSTRUCTION FLOATING POINT * 00558001
0005B0 4540 5C08            00C50     621 TRREIN8  BAL   R4,ROUTIN12               RELEASE REG CONTAINING OPD    00559001
0005B4 47F0 553E            00586     622          B     TREIN6                                                  00560001
                                      623 *                                                                      00561001
0005B8 00000000                       624 SAVTRREI DC    F'0'                      SAVE AREA FOR RETURN          00562001
                                      625 *                                                                      00563001
                                      626 ********************************************************************** 00564001
                                      627 *                                                                      00565001
                                      628 *        S U B R O U T I N E   G E N E R A T E                         00566001
                                      629 *                                                                      00567001
                                      630 ********************************************************************** 00568001
                                      631 *                                                                      00569001
                                      632 *        GENERATE RLD RECORDS                                          00570001
                                      633 *                                                                      00571001
                                      634 * CALL   L     R2,                       VALUE OF PROGRAM POINTER      00572001
                                      635 *        BAL   R14,GENRLD                                              00573001
                                      636 *        DC    H' '                      LENGTH OF ADDR TABLE          00574001
                                      637 *        DC    H'  '                     ESID OF RELOCATION FACTOR R   00575001
                                      638 *        DC    H'  '                     ESID OF POSITION IDENTIFIER P 00576001
                                      639 *        ---                             RETURN AFTER CALL GENERATE    00577001
                                      640 *                                                                      00578001
                                      641 *        GENERATE TXT RECORDS SIX DIFFERENT CALLS                      00579001
                                      642 *                                                                      00580001
                                      643 *        BAL   R2,GENTXT2                                              00581001
                                      644 *        RR FORMAT INSTRUCTION OR DATA 2 BYTES LONG                    00582001
                                      645 *        ---                             RETURN AFTER CALL GENERATE    00583001
                                      646 *                                                                      00584001
                                      647 *        BAL   R2,GENTXTP2                                             00585001
                                      648 *        RR FORMAT FLOATING POINT LONG FORM INSTRUCTION                00586001
                                      649 *        ---                             RETURN AFTER CALL GENERATE    00587001
                                      650 *                                                                      00588001
                                      651 *        BAL   R2,GENTXT4                                              00589001
                                      652 *        INSTRUCTION(S) OR DATA 4 BYTES LONG                           00590001
                                      653 *        ---                             RETURN AFTER CALL GENERATE    00591001
                                      654 *                                                                      00592001
                                      655 *        BAL   R2,GENTXTP4                                             00593001
                                      656 *        RX  FORMAT FLOATING POINT LONG FORM INSTRUCTION               00594001
                                      657 *        ---                             RETURN AFTER CALL GENERATE    00595001
                                      658 *                                                                      00596001
                                      659 *        BAL   R2,GENTXT6                                              00597001
                                      660 *        INSTRUCTIONS OR DATA 6 BYTES LONG                             00598001
                                      661 *        ---                             RETURN AFTER CALL GENERATE    00599001
                                      662 *                                                                      00600001
                                      663 *        LA    R2,                       ADDR OF CODE TO BE GENERATED  00601001
                                      664 *        BAL   R14,GENTXT8                                             00602001
                                      665 *        DC    H'  '                     LENGTH OF CODE IN BYTES       00603001
                                      666 *        ---                             RETURN AFTER CALL GENERATE    00604001
                                      667 *                                                                      00605001
                                      668 *        REGISTER DEFINITIONS                                          00606001
                                      669 *                                                                      00607001
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  Active USINGs: IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    670 *          R1                           OUTPUT RECORD POINTER        00608001
                                    671 *          R2                           ADDR OF DATA                 00609001
                                    672 *          R3                           TYPE OF RECORD TO BE GENERATED  00610001
                                    673 *          R4                           RETURN REGISTER              00611001
                                    674 *          R14                          LENGTH OF DATA FROM CALL     00612001
                                    675 *          R15                          LENGTH WITHIN RECORD         00613001
                                    676 *                                                                    00614001
                                    677 *          BIT PATTERNS                                              00615001
                                    678 *                                                                    00616001
                     00000          679 SDENTRY  EQU   X'00'                    SD ENTRY IDENTIFICATION      00617001
                     00001          680 LDENTRY  EQU   X'01'                    LD ENTRY IDENTIFICATION      00618001
                     0000C          681 RLDFLAG  EQU   B'00001100'              FLAG USED IN RLD ENTRY       00619001
                                    682 *                                                                    00620001
                                    683 *          GENERATE RLD RECORDS                                      00621001
                                    684 *                                                                    00622001
0005BC 4140 E006           00006    685 GENRLD   LA    R4,6(,R14)               COMPUTE RETURN ADDR          00623001
0005C0 4130 56D0           00718    686          LA    R3,RLDT                  INDICATE RLD CALL            00624001
0005C4 48E0 E000           00000    687          LH    R14,0(,R14)              LOAD LENGTH GIVEN IN CALL    00625001
0005C8 89E0 0001           00001    688          SLL   R14,1                    DOUBLE LENGTH                00626001
0005CC 47F0 55BA           00602    689          B     GEN1                     CONTINUE COMMON PART         00627001
                                    690 *                                                                    00628001
                                    691 *          GENERATE TXT RECORDS                                      00629001
                                    692 *                                                                    00630001
0005D0 4140 E002           00002    693 GENTXTS  LA    R4,2(,R14)               COMPUTE RETURN ADDR          00631001
0005D4 48E0 E000           00000    694          LH    R14,0(,R14)              LOAD LENGTH GIVEN IN CALL    00632001
0005D8 47F0 55B6           005FE    695          B     GEN2                     CONTINUE TXT ENTRY           00633001
                                    696 *                                                                    00634001
                                    697 *          GENERATE RX OR RS INSTRUCTION, CHANGE PRECISION           00635001
                                    698 *                                                                    00636001
0005DC 9706 55AD     005F5          699 GENTXTP4 XI    GENTXT6+7,X'06'          MODIFY LENGTH INSTRUCTION    00637001
                                    700 *                                                                    00638001
                                    701 *          GENERATE RR INSTRUCTION, CHANGE PRECISION                 00639001
                                    702 *                                                                    00640001
0005E0 D600 2000 DA58 00000 00A58   703 GENTXTP2 OC    0(1,R2),PRECMASK         MODIFY INSTRUCTION, L OR S   00641001
                                    704 *                                                                    00642001
                                    705 *          GENERATE TXT RECORD,2                                     00643001
                                    706 *                                                                    00644001
0005E6 9706 55AD     005F5          707 GENTXT2  XI    GENTXT6+7,X'06'          MODIFY LENGTH INSTRUCTION    00645001
                                    708 *                                                                    00646001
                                    709 *          GENERATE TXT RECORD,4                                     00647001
                                    710 *                                                                    00648001
0005EA 9702 55AD     005F5          711 GENTXT4  XI    GENTXT6+7,X'02'          MODIFY LENGTH INSTRUCTION    00649001
                                    712 *                                                                    00650001
                                    713 *          GENERATE TXT RECORD,6                                     00651001
                                    714 *                                                                    00652001
0005EE 50E0 D5BC           005BC    715 GENTXT6  ST    R14,PLACE14              SAVE LENGTH REGISTER         00653001
0005F2 41E0 0006           00006    716          LA    R14,6                    LENGTH = 2, 4 OR 6           00654001
0005F6 9206 55AD     005F5          717          MVI   GENTXT6+7,X'06'          RESTORE MODIFIED INSTRUCTION 00655001
0005FA 4142 E000           00000    718          LA    R4,0(R2,R14)             COMPUTE RETURN ADDR          00656001
0005FE 4130 56AA           006F2    719 GEN2     LA    R3,TXTT                  INDICATE TXT CALL            00657001
000602 5810 D0A8           000A8    720 GEN1     L     R1,SAVOUTA               FETCH OLD OUTPUT RECORD ADDR 00658001
000606 9160 D081     00081          721          TM    COMPFLGS+1,NLOAD+NDECK   LOAD OR DECK SPECIFIED ?     00659001
00060A 4710 560A           00652    722          BO    GEN4A                    NO, OUT OF GENERATE          00660001
00060E 9180 D080     00080          723          TM    COMPFLGS,COMPMODE        SYNTAX CHECK MODE ?          00661001
000612 4710 560A           00652    724          BO    GEN4A                                                 00662001
000616 D502 1001 3001 00001 00001   725          CLC   1(3,R1),1(R3)            RECORD RIGHT TYPE ?          00663001
00061C 4770 5610           00658    726          BNE   GEN3                     NO, CALL FOR NEW             00664001
000620 D501 100A 300C 0000A 0000C   727          CLC   10(2,R1),12(R3)          RECORD FILLED ?              00665001
000626 47B0 5610           00658    728          BNL   GEN3                     YES, CALL FOR NEW            00666001
00062A 41F0 0038           00038    729 GEN6     LA    R15,56                                                00667001
00062E 4800 100A           0000A    730          LH    R0,10(,R1)               R0 = LENGTH OF DATA IN REC   00668001
000632 1BF0                         731          SR    R15,R0                   R15 = EMPTY POS LEFT IN RECORD  00669001
000634 19FE                         732          CR    R15,R14                  ENOUGH SPACE LEFT ?          00670001
000636 4740 55F4           0063C    733          BL    *+6                      NO                           00671001
00063A 18FE                         734          LR    R15,R14                  YES, R15 = R14 FROM CALL     00672001
00063C 1AF0                         735          AR    R15,R0                                                00673001
00063E 40F0 100A           0000A    736          STH   R15,10(,R1)              INSERT NEW LENGTH INTO RECORD  00674001
000642 1BF0                         737          SR    R15,R0                                                00675001
000644 1A10                         738          AR    R1,R0                    START ADDR WITHIN RECORD     00676001
000646 1BEF                         739          SR    R14,R15                  REMAINING LENGTH             00677001
000648 47F0 300E           0000E    740          B     14(,R3)                  TO DIFFERENT MOVE ROUTINES   00678001
                                    741 *                                                                    00679001
00064C 12EE                         742 GEN4     LTR   R14,R14                  MORE INFORMATION MUST BE MOVED ? 00680001
00064E 4720 5610           00658    743          BH    GEN3                     YES                          00681001
000652 58E0 D5BC           005BC    744 GEN4A    L     R14,PLACE14              NO, RESTORE R14              00682001
000656 07F4                         745          BR    R4                       RETURN                       00683001
                                    746 *                                                                    00684001
                                    747 *          NEW OUTPUT RECORD                                         00685001
                                    748 *                                                                    00686001
000658 50E0 5700           00748    749 GEN3     ST    R14,SAVELT               SAVE LENGTH                  00687001
00065C 9160 D081     00081          750          TM    COMPFLGS+1,NLOAD+NDECK   BOTH LOAD AND DECK SPECIFIED ?  00688001
000660 4780 5640           00688    751          BZ    BOTH                     YES                          00689001
000664 9120 D081     00081          752          TM    COMPFLGS+1,NDECK         DECK ONLY ?                  00690001
000668 5810 D060           00060    753          L     R1,APCHDCB               R1 -> SYSPUNCH DCB           00691001
00066C 4780 562C           00674    754          BZ    PUT1                     YES                          00692001
000670 5810 D048           00048    755 PUT$1    L     R1,ALINDCB               R1 -> SYSLIN DCB             00693001
                                    756 *                                                                    00694001
                                    757 PUT1     PUT   (R1)                     PUT FOR SYSLIN AND SYSPUNCH  00695001
000674 1811                         758+PUT1     LR    1,R1                               LOAD PARAMETER REG 1  02-IHBIN
000676 58F0 1030           00030    759+         L     15,48(0,1)                LOAD PUT ROUTINE ADDR       01-PUT
00067A 05EF                         760+         BALR  14,15                     LINK TO PUT ROUTINE         01-PUT
                                    761 *                                                                    00696001
00067C 5010 D0A8           000A8    762          ST    R1,SAVOUTA               SYSPUNCH OR SYSLIN ADDR      00697001
000680 58E0 5700           00748    763          L     R14,SAVELT               RESTORE LENGTH               00698001
000684 47F0 5662           006AA    764          B     PUNCHOUT                 OUT OF ROUTINE PUNCH         00699001
                                    765 *                                                                    00700001
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  Active USINGs: IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000688 58E0 D0AC            000AC   766 BOTH     L     R14,OUTAREA2          COPY SYSLIN DATA TO SYSPUNCH      00701001
00068C 5810 D0A8            000A8   767          L     R1,SAVOUTA                                              00702001
000690 D24F E000 1000 00000 00000   768          MVC   0(80,R14),0(R1)       BUFFER                            00703001
000696 5810 D060            00060   769 PUT2     L     R1,APCHDCB            R1 -> SYSPUNCH DCB                00704001
                                    770 *                                                                      00705001
                                    771          PUT   (R1)                  PUT FOR SYSPUNCH WHEN BOTH HAS    00706001
00069A 1811                         772+         LR    1,R1                            LOAD PARAMETER REG 1    02-IHBIN
00069C 58F0 1030            00030   773+         L     15,48(0,1)                  LOAD PUT ROUTINE ADDR       01-PUT
0006A0 05EF                         774+         BALR  14,15                       LINK TO PUT ROUTINE         01-PUT
                                    775 *                                                                      00707001
0006A2 5010 D0AC            000AC   776          ST    R1,OUTAREA2           BEEN SPECIFIED                    00708001
0006A6 47F0 5628            00670   777          B     PUT$1                 GOTO PUT SYSLIN                   00709001
                                    778 *                                                                      00710001
0006AA D203 1000 3000 00000 00000   779 PUNCHOUT MVC   0(4,R1),0(R3)         INSERT FIRST 4 BYTES              00711001
0006B0 9240 1004      00004         780          MVI   4(R1),C' '            INSERT ONE BLANK                  00712001
0006B4 D242 1005 1004 00005 00004   781          MVC   5(67,R1),4(R1)        BLANK OUTPUT RECORD               00713001
0006BA D203 1048 D0B0 00048 000B0   782          MVC   72(4,R1),PIDENT       INSERT PROGRAM IDENT              00714001
0006C0 FA31 D0B4 5704 000B4 0074C   783          AP    CARDCNT,KP1           STEP SEQUENCE NUMBER              00715001
0006C6 F333 104C D0B4 0004C 000B4   784          UNPK  76(4,R1),CARDCNT      UNPACK INTO RECORD                00716001
0006CC 96F0 104F      0004F         785          OI    79(R1),X'F0'          MAKE PRINTABLE                    00717001
0006D0 D201 100A 3004 0000A 00004   786          MVC   10(2,R1),4(R3)        INSERT INITIAL LENGTH             00718001
0006D6 D205 100E 3006 0000E 00006   787          MVC   14(6,R1),6(R3)        INSERT ESID+R AND P               00719001
0006DC D502 56AB 3001 006F3 00001   788          CLC   TXTT+1(3),1(R3)       TXT RECORD PROCESSED ?            00720001
0006E2 4770 55E2            0062A   789          BNE   GEN6                  NO                                00721001
0006E6 5061 0004            00004   790          ST    R6,4(R1)              YES INSERT R6                     00722001
0006EA 9240 1004      00004         791          MVI   4(R1),C' '                                              00723001
0006EE 47F0 55E2            0062A   792          B     GEN6                                                    00724001
                                    793 *                                                                      00725001
                                    794 *        TXT RECORD                                                    00726001
                                    795 *                                                                      00727001
0006F2                              796          DC    0H'0'                                                   00728001
0006F2 02                           797 TXTT     DC    X'02'                 RECORD CODE                       00729001
0006F3 E3E7E3                       798          DC    C'TXT'                IDENTIFICATION                    00730001
0006F6 0000                         799          DC    H'0'                  INITIAL LENGTH 0                  00731001
0006F8 0001                         800          DC    H'1'                  ESID                              00732001
0006FA 40404040                     801          DC    C'    '                                                 00733001
0006FE 0038                         802          DC    H'56'                 MAXIMUM LENGTH                    00734001
                                    803 *                                                                      00735001
                                    804 *        MOVE TXT INFORMATION TO OUTAREA                               00736001
                                    805 *                                                                      00737001
000700 06F0                         806 GEN8     BCTR  R15,0                 DECR LENGTH                       00738001
000702 42F0 56BF            00707   807          STC   R15,*+5               INSERT PROPER LENGTH TO MOVE      00739001
000706 D200 1010 2000 00010 00000   808          MVC   16(0,R1),0(R2)        MOVE DATA TO OUTAREA              00740001
00070C 416F 6001            00001   809          LA    R6,1(R15,R6)          INCREASE PROGRAM POINTER          00741001
000710 412F 2001            00001   810          LA    R2,1(R15,R2)          MODIFY DATA ADDR                  00742001
000714 47F0 5604            0064C   811          B     GEN4                  OUT OF MOVE TXT ROUTINE           00743001
                                    812 *                                                                      00744001
                                    813 *        RLD RECORD                                                    00745001
                                    814 *                                                                      00746001
000718                              815          DC    0H'0'                                                   00747001
000718 02                           816 RLDT     DC    X'02'                 RECORD CODE                       00748001
000719 D9D3C4                       817          DC    C'RLD'                IDENTIFICATION                    00749001
00071C 0000                         818          DC    H'0'                  INITIAL LENGTH 0                  00750001
00071E 4040                         819          DC    C'  '                                                   00751001
000720 00010001                     820 RANDP    DC    H'1',H'1'             R AND P ESID ARE 1 AT START       00752001
000724 0038                         821          DC    H'56'                 MAXIMUM LENGTH IN RECORD          00753001
                                    822 *                                                                      00754001
                                    823 *        MOVE RLD INFORMATION TO OUTAREA                               00755001
                                    824 *                                                                      00756001
000726 1AF1                         825 GEN9     AR    R15,R1                INDICATE LAST ENTRY               00757001
000728 D203 1010 56D8 00010 00720   826 GEN5     MVC   16(4,R1),RANDP                                          00758001
00072E 5020 1014            00014   827          ST    R2,20(,R1)            MOVE PROGRAM POINTER VALUE AND    00759001
000732 920C 1014      00014         828          MVI   20(R1),RLDFLAG        FLAG TO OUTAREA                   00760001
000736 4110 1008            00008   829          LA    R1,8(,R1)             NEXT ENTRY                        00761001
00073A 4120 2004            00004   830          LA    R2,4(,R2)             NEXT PROGRAM POINTER VALUE        00762001
00073E 191F                         831          CR    R1,R15                LAST COLUMN FILLED                00763001
000740 4740 56E0            00728   832          BL    GEN5                  NO, CONTINUE                      00764001
000744 47F0 5604            0064C   833          B     GEN4                  OUT OF MOVE RLD ROUTINE           00765001
                                    834 *                                                                      00766001
                                    835 *        VARIABLES AND CONSTANTS                                       00767001
                                    836 *                                                                      00768001
000748 00000000                     837 SAVELT   DC    F'0'                  SAVE AREA FOR LENGTH              00769001
00074C 001C                         838 KP1      DC    PL2'1'                FOR INCREMENTING CARD COUNT       00770001
                                    839 *                                                                      00771001
                                    840 ********************************************************************** 00772001
                                    841 *                                                                      00773001
                                    842 *        SUBROUTINE CLEAR REGISTERS                                    00774001
                                    843 *                                                                      00775001
                                    844 ********************************************************************** 00776001
                                    845 *                                                                      00777001
                                    846 * CALL   BAL   R4,CLEARRG                                              00778001
                                    847 *                                                                      00779001
                                    848 *        GENERATES STORE INSTRUCTIONS FOR ALL REGISTERS THAT           00780001
                                    849 *        CONTAIN VALID INFORMATION - SET CII, CIR, RII, RIR            00781001
                                    850 *                                                                      00782001
00074E 92FF DA61      00A61         851 CLEARRG  MVI   GPBN+1,X'FF'          DESTROY GDSA                      00783001
000752 5040 D578            00578   852          ST    R4,RETADR             STORE RETURN ADDR                 00784001
000756 1BEE                         853          SR    R14,R14                                                 00785001
000758 06E0                         854          BCTR  R14,0                                                   00786001
00075A 06E0                         855          BCTR  R14,0                                                   00787001
00075C 4820 DA48            00A48   856          LH    R2,RIR                                                  00788001
000760 41E0 E002            00002   857 KIF22    LA    R14,2(,R14)                                             00789001
000764 1222                         858          LTR   R2,R2                                                   00790001
000766 4780 573C            00784   859          BZ    KIF21                 YES, BRANCH                       00791001
00076A 8C20 0001            00001   860          SRDL  R2,1                                                    00792001
00076E 1233                         861          LTR   R3,R3                                                   00793001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000770 47B0 5718              00760   862           BNM   KIF22                  NO, BRANCH             00794001
000774 5020 D5B8              005B8   863           ST    R2,RETADR+64                                  00795001
000778 4540 5C66              00CAE   864           BAL   R4,ROUTIN13                                   00796001
00077C 5820 D5B8              005B8   865           L     R2,RETADR+64                                  00797001
000780 47F0 5718              00760   866           B     KIF22                                         00798001
                                      867 *                                                             00799001
000784 9200 DA44        00A44         868 KIF21     MVI   CIR,0                                         00800001
000788 9206 DA45        00A45         869           MVI   CIR+1,X'06'                                   00801001
00078C D201 DA48 DA50 00A48 00A50     870           MVC   RIR(2),ZEROHW          CLEAR RIR              00802001
000792 1BEE                           871           SR    R14,R14                                       00803001
000794 06E0                           872           BCTR  R14,0                                         00804001
000796 4820 DA46              00A46   873           LH    R2,RII                                        00805001
00079A 41E0 E001              00001   874 KIF25     LA    R14,1(,R14)                                   00806001
00079E 1222                           875           LTR   R2,R2                                         00807001
0007A0 4780 5776              007BE   876           BZ    KIF24                  BRANCH IF YES          00808001
0007A4 8C20 0001              00001   877           SRDL  R2,1                                          00809001
0007A8 1233                           878           LTR   R3,R3                                         00810001
0007AA 47B0 5752              0079A   879           BNM   KIF25                  BRANCH IF NO           00811001
0007AE 5020 D5B8              005B8   880           ST    R2,RETADR+64                                  00812001
0007B2 4540 5B4E              00B96   881           BAL   R4,ROUTINE9                                   00813001
0007B6 5820 D5B8              005B8   882           L     R2,RETADR+64                                  00814001
0007BA 47F0 5752              0079A   883           B     KIF25                                         00815001
                                      884 *                                                             00816001
0007BE 9200 DA42        00A42         885 KIF24     MVI   CII,0                                         00817001
0007C2 9207 DA43        00A43         886           MVI   CII+1,X'07'                                   00818001
0007C6 D201 DA46 DA50 00A46 00A50     887           MVC   RII(2),ZEROHW          CLEAR RII              00819001
0007CC 5840 D578              00578   888           L     R4,RETADR              LOAD RETURN ADDR       00820001
0007D0 07F4                           889           BR    R4                                            00821001
                                      890 *                                                             00822001
                                      891 ********************************************************************** 00823001
                                      892 *                                                             00824001
                                      893 *         O P E R A N D   R E C O G N I Z E R                 00825001
                                      894 *                                                             00826001
                                      895 ********************************************************************** 00827001
                                      896 *                                                             00828001
                                      897 * CALL    BAL   R4,OPDREC                                     00829001
                                      898 *                                                             00830001
                                      899 *         CHECK IF OPERAND IN STACK IS A FORMAL PARAMETER OR A 00831001
                                      900 *         PROCEDURE WITHOUT PARAMETERS                        00832001
                                      901 *         OPDREC GENERATES AN ACTUAL PARAMETER OR A PROCEDURE CALL 00833001
                                      902 *                                                             00834001
                                      903 *         IF OPERAND IS A FORMAL PARAMETER CALLED BY VALUE LABEL 00835001
                                      904 *         OR ARRAY OPDREC GENERATES LOAD OF REGISTERS GDSA AND/OR ADR 00836001
                                      905 *                                                             00837001
                                      906 *         ADDR DISPLACEMENTS                                  00838001
                                      907 *                                                             00839001
                        00001         908 TYPS      EQU   1                      SECOND BYTE TYPE IN IDENTIFIER 00840001
                        00003         909 NUMP      EQU   3                      NO OF PARAMETERS IN IDENTIFIER 00841001
                        00002         910 PBNP      EQU   2                      DISP OF PBN IN IDENTIFIER      00842001
                        00000         911 TYPF      EQU   0                      FIRST BYTE TYPE IN IDENTIFIER  00843001
                        00020         912 RUTIADR   EQU   4*8                    ENTRY IN RUTI TABLE FOR ADR    00844001
                                      913 *                                                             00845001
                                      914 *         BIT PATTERNS                                        00846001
                                      915 *                                                             00847001
                        00030         916 VARIAM    EQU   X'30'                  MASK FOR VARIABLE              00848001
                        0007F         917 INTRVM    EQU   X'7F'                  INTERMIDIATE VALUE IN STACK    00849001
                        00060         918 INTRRM    EQU   X'60'                  INTERMIDIATE VALUE ADDR IN REG 00850001
                        000FF         919 DESTROY   EQU   X'FF'                  INDICATE THAT GDSA IS NOT VALID 00851001
                        00004         920 ARRAYM    EQU   X'04'                  ARRAY IDENTIFIER MASK          00852001
                        0000C         921 LABARRM   EQU   X'0C'                  LABEL OR ARRAY IDENTIFIER MASK 00853001
                        00001         922 RIIADRM   EQU   X'01'                  RII MASK FOR RESERVATION OF ADR 00854001
                        00030         923 FORMPM    EQU   X'30'                  FORMAL PARAMETER MASK          00855001
                        000C0         924 PROCM     EQU   X'C0'                  PROCEDURE MASK                 00856001
                        00040         925 STPROCM   EQU   X'40'                  STANDARD PROCEDURE MASK        00857001
                        000F0         926 PARAM     EQU   X'F0'                  NUMBER OF PARAMETER MASK       00858001
                        00003         927 FUNCPM    EQU   X'03'                  FUNCTION PROCEDURE MASK        00859001
                        00020         928 VALUEM    EQU   X'20'                  VALUE PARAMETER SPEC           00860001
                        00080         929 REGADRM   EQU   ADR*16                 REGISTER ADR MASK              00861001
                                      930 *                                                             00862001
0007D2 91C0 9000        00000         931 OPDREC    TM    0(R9),X'C0'            IDENTIFIER FROM ITAB ?         00863001
0007D6 07E4                           932           BNOR  R4                     NO, RETURN                     00864001
0007D8 9130 9001        00001         933           TM    TYPS(R9),FORMPM        OPERAND FORMAL PARAMETER ?     00865001
0007DC 5040 58B4              008FC   934           ST    R4,SAVRT               SAVE RETURN ADDR               00866001
0007E0 4740 57D6              0081E   935           BM    OPDREC1                YES, FORMAL                    00867001
0007E4 91C0 9001        00001         936           TM    TYPS(R9),PROCM         PROCEDURE IDENTIFIER ?         00868001
0007E8 0784                           937           BZR   R4                     NO, RETURN                     00869001
0007EA 9140 9001        00001         938           TM    TYPS(R9),STPROCM       STANDARD PROCEDURE ?           00870001
0007EE 0784                           939           BZR   R4                     YES, RETURN                    00871001
0007F0 91F0 9003        00003         940           TM    NUMP(R9),PARAM         PARAMETERLESS PROCEDURE ?      00872001
0007F4 0774                           941           BNZR  R4                     NO, RETURN                     00873001
                                      942 *                                                             00874001
                                      943 *         PARAMETERLESS PROCEDURE FOUND                       00875001
                                      944 *                                                             00876001
0007F6 4540 5706              0074E   945           BAL   R4,CLEARRG             CLEAR ALL OBJ TIME REGISTERS   00877001
0007FA D201 5894 9003 008DC 00003     946           MVC   PPCODE+2(2),NUMP(R9)   INSERT DISPLACEMENT OF LABEL   00878001
000800 D200 5897 9002 008DF 00002     947           MVC   PPCODE+5(1),PBNP(R9)   INSERT PROGRAM BLOCK NUMBER    00879001
000806 4120 5892              008DA   948           LA    R2,PPCODE              GENERATE A PARAMETERLESS       00880001
00080A 45E0 5588              005D0   949           BAL   R14,GENTXTS            PROCEDURE                      00881001
00080E 000C                           950           DC    H'12'                  CALL                           00882001
000810 9103 9001        00001         951           TM    TYPS(R9),FUNCPM        FUNCTION PROCEDURE             00883001
000814 5840 58B4              008FC   952           L     R4,SAVRT                                      00884001
000818 0784                           953           BZR   R4                     NO, RETURN                     00885001
                                      954 *                              PARAMETERLESS FUNCTION         00886001
                                      955 *                              PROC FOUND                     00887001
00081A 47F0 5826              0086E   956           B     OPDREC4                                       00888001
                                      957 *                                                             00889001
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  Active USINGs: IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    958 *         FORMAL PARAMETER FOUND                                    00890001
                                    959 *                                                                   00891001
00081E 9120 9001      00001         960 OPDREC1  TM    TYPS(R9),VALUEM          CALLED BY NAME ?            00892001
000822 4710 585A            008A2   961          BO    OPDREC3                  NO                          00893001
                                    962 *                                       FORMAL PARAMETER CALLED BY NAME 00894001
000826 4540 5706            0074E   963          BAL   R4,CLEARRG               CLEAR ALL OBJ TIME REGISTERS 00895001
00082A 1B33                         964          SR    R3,R3                                                00896001
00082C 4330 9002            00002   965          IC    R3,PBNP(,R9)             PROCEDURE PBN FROM IDENTIFIER 00897001
000830 8930 0003            00003   966          SLL   R3,3                     DISPLACEMENT IN PBT         00898001
000834 4030 58A2            008EA   967          STH   R3,CAP+4                 INSERTED IN CAP CODE        00899001
000838 4830 DA5C            00A5C   968          LH    R3,SPBNST                CURRENT PBN                 00900001
00083C 8930 0003            00003   969          SLL   R3,3                     DISPLACEMENT IN PBT         00901001
000840 4030 58A4            008EC   970          STH   R3,CAP+6                 INSERTED IN CAP CODE        00902001
000844 D201 58A8 9003 008F0 00003   971          MVC   CAP+10(2),NUMP(R9)       INSERT FORMAL PARAM DISPL   00903001
00084A 4120 589E            008E6   972          LA    R2,CAP                   GENERATE CALL ACTUAL PARAMETER 00904001
00084E 45E0 5588            005D0   973          BAL   R14,GENTXTS              CODE                        00905001
000852 000C                         974          DC    H'12'                                                00906001
                                    975 *                                                                   00907001
000854 91C0 9001      00001         976          TM    TYPS(R9),PROCM           PROCEDURE                   00908001
000858 4780 5826            0086E   977          BZ    OPDREC4                  NO                          00909001
00085C 9180 58B8      00900         978          TM    PROCWPS,X'80'                                        00910001
000860 4710 5826            0086E   979          BO    OPDREC4                  NOT PARAMETERLESS, SET IN CP57 00911001
000864 4120 58AA            008F2   980          LA    R2,OPDREC6               GENERATE                    00912001
000868 45E0 5588            005D0   981          BAL   R14,GENTXTS              CHECK FOR PARAMETERLESS     00913001
00086C 000A                         982          DC    H'10'                    PROCEDURE                   00914001
                                    983 *                                                                   00915001
00086E 4A70 DA56            00A56   984 OPDREC4  AH    R7,ONEENTRY              RESERVE ONE ENTRY IN OBJ STACK 00916001
000872 4070 DA5E            00A5E   985          STH   R7,SPBNST+2              INSERT NEW DISPL AND        00917001
000876 D202 9002 DA5D 00002 00A5D   986          MVC   PBNP(3,R9),SPBNST+1      PBN IN INTERNAL NAME        00918001
00087C 9760 9000      00000         987          XI    TYPF(R9),INTRRM          ADDR OF OPERAND IN REGISTER 00919001
000880 9680 9003      00003         988          OI    NUMP(R9),REGADRM         INDICATE REGISTER ADR       00920001
000884 5090 D5E0            005E0   989          ST    R9,RUTI+RUTIADR          GPR CONTROL ENTRY RUTI      00921001
000888 9601 DA46      00A46         990          OI    RII,RIIADRM              GPR CONTROL ENTRY RII       00922001
00088C 5840 58B4            008FC   991          L     R4,SAVRT                                             00923001
000890 9104 9001      00001         992          TM    TYPS(R9),ARRAYM                                      00924001
000894 0714                         993          BOR   R4                                                   00925001
000896 9103 9001      00001         994          TM    TYPS(R9),X'03'                                       00926001
00089A 0784                         995          BZR   R4                                                   00927001
00089C 9200 9002      00002         996          MVI   PBNP(R9),X'00'           INDICATE SPECIAL ADDR ADR   00928001
                                    997 *                                       MAY POINT TO FCTVALST IN FSA 00929001
                                    998 *                                       ROUTINE 9 CHECK THIS        00930001
0008A0 07F4                         999          BR    R4                       RETURN                      00931001
                                   1000 *                                                                   00932001
                                   1001 *         FORMAL PARAMETER CALLED BY VALUE                          00933001
                                   1002 *                                                                   00934001
0008A2 910C 9001      00001        1003 OPDREC3  TM    TYPS(R9),LABARRM         LABEL OR ARRAY IDENTIFIER   00935001
0008A6 07B4                        1004          BNMR  R4                       NO, RETURN                  00936001
0008A8 4540 59F2            00A3A  1005          BAL   R4,ROUTINE3              GENERATE LOAD ADR           00937001
0008AC 4A70 DA56            00A56  1006          AH    R7,ONEENTRY              OBJECT TIME STACK NOT RELEASED 00938001
0008B0 9104 9001      00001        1007          TM    TYPS(R9),ARRAYM          ARRAY IDENTIFIER            00939001
0008B4 4710 5826            0086E  1008          BO    OPDREC4                  YES, INTERNAL NAME AND REG CONTR 00940001
0008B8 4130 0004            00004  1009          LA    R3,4                                                 00941001
0008BC 4A30 5A40            00A88  1010          AH    R3,GRD3+2                ADD 4 TO DISP, GRD3 IN ROUTINE3 00942001
0008C0 4030 5888            008D0  1011          STH   R3,OPDREC5+2             INSERT DISP+4 (CDSA OR GDSA) 00943001
0008C4 D100 5887 5A3F 008CF 00A87  1012          MVN   OPDREC5+1(1),GRD3+1      IN LOAD GDSA INSTRUCTION    00944001
0008CA 4520 55A2            005EA  1013          BAL   R2,GENTXT4               GENERATE A LOAD GDSA        00945001
0008CE 5890 0004            00004  1014 OPDREC5  L     GDSA,4(0,0)              INSTRUCTION                 00946001
0008D2 92FF DA61      00A61        1015          MVI   GPBN+1,DESTROY           NOTE THAT GDSA IS DESTROYED 00947001
0008D6 47F0 5826            0086E  1016          B     OPDREC4                  INTERNAL NAME AND REG CONTROL 00948001
                                   1017 *                                                                   00949001
                                   1018 *         CONSTANTS AND VARIABLES                                   00950001
                                   1019 *                                                                   00951001
0008DA 588C 0000            00000  1020 PPCODE   L     ADR,0(LAT,0)             PARAMETERLESS PROCEDURE CALL 00952001
0008DE 9200 D0A9      000A9        1021          MVI   PROLPBN(FSA),0           CODE, DISP INSERTED         00953001
0008E2 45F0 D0E0            000E0  1022          BAL   BRR,PROLOG(,FSA)         CODE IS 12 BYTES            00954001
                                   1023 *                                                                   00955001
                                   1024 *         CALL ACTUAL PARAMETER, GENERATED CODE                     00956001
                                   1025 *         DISPL, PBNP AND PBNC INSERTED                             00957001
                                   1026 *                                                                   00958001
0008E6 45F0 D0D4            000D4  1027 CAP      BAL   BRR,CAP1(,FSA)           TO CAP SUBROUTINE FIRST PART 00959001
0008EA 0000                        1028          DC    H'0'                     PBNP, PBN DISP OF PROCEDURE 00960001
0008EC 0000                        1029          DC    H'0'                     PBNC, PBN DISP OF CURRENT BLOCK 00961001
0008EE 588A 0000            00000  1030          L     ADR,0(CDSA,0)            THUNK ADDR FROM PROCEDURE DSA 00962001
0008F2 41ED 0090            00090  1031 OPDREC6  LA    R14,FCTVALST(FSA)        CHECK THAT ACTUAL           00963001
0008F6 19E8                        1032          CR    R14,ADR                  PARAMETER PROCEDURE         00964001
0008F8 477D 0220            00220  1033          BNE   OERR21(FSA)              IS PARAMETERLESS            00965001
                                   1034 *                                                                   00966001
0008FC 00000000                    1035 SAVRT    DC    F'0'                     SAVE AREA FOR RETURN        00967001
000900 00                          1036 PROCWPS  DC    X'00'                    SWITCH TO AVOID PARAMETERLESS 00968001
                                   1037 *                                       PROCEDURE CHECK             00969001
                                   1038 *                                                                   00970001
                                   1039 ********************************************************************** 00971001
                                   1040 *                                                                   00972001
                                   1041 *         S U B R O U T I N E   M A X C H E C K                     00973001
                                   1042 *                                                                   00974001
                                   1043 ********************************************************************** 00975001
                                   1044 *                                                                   00976001
                                   1045 *         SUBROUTINE TO CHECK THAT OBJECT TIME STACK POINTER        00977001
                                   1046 *         VALUE IS LESS THAN MAX VALUE PLACED IN WORKPL BY CALLING  00978001
                                   1047 *         ROUTINE                                                   00979001
                                   1048 *                                                                   00980001
                                   1049 * CALL    BAL   R4,MAXCH                                            00981001
                                   1050 *                                                                   00982001
000901 00
000902 90F4 58F4            0093C  1051 MAXCH    STM   R15,R4,MCHSAV            SAVE REGISTERS              00983001
000906 4840 D5F8            005F8  1052          LH    R4,WORKPL                FETCH CHECKVALUE FROM WORKAREA 00984001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00090A 4830 DA5C              00A5C  1053          LH    R3,SPBNST            CURRENT PBN FROM WORKAREA        00985001
00090E 8930 0002              00002  1054          SLL   R3,2                 PBT DISPLACEMENT                 00986001
000912 4943 D630              00630  1055          CH    R4,PBTAB3(R3)        R4 < MAX IN PBTAB3 ?             00987001
000916 47D0 58EC              00934  1056          BNH   MAXCH1               YES, RETURN                      00988001
00091A 4043 D630              00630  1057          STH   R4,PBTAB3(R3)        INSERT R4 AS NEW MAX             00989001
00091E 4940 DA62              00A62  1058          CH    R4,MAXOVERF          OVERFLOW OF OBJECT TIME STACK ?  00990001
000922 47D0 58EC              00934  1059          BNH   MAXCH1               NO, RETURN                       00991001
000926 1974                          1060          CR    R7,R4                R7 ALREADY BEEN RESET ?          00992001
000928 4740 58EC              00934  1061          BL    MAXCH1               YES, NO ERROR MSG                00993001
00092C 1B77                          1062          SR    R7,R7                NO, RESET R7 TO ZERO             00994001
00092E 4540 5356              0039E  1063          BAL   R4,SERRSP            ERROR PATTERN GENERATION         00995001
000932 00D6                          1064          DC    H'214'               ERROR 214                        00996001
                                     1065 *                                                                    00997001
000934 98F4 58F4              0093C  1066 MAXCH1   LM    R15,R4,MCHSAV        RESTORE REGISTERS                00998001
000938 07F4                          1067          BR    R4                   RETURN                           00999001
                                     1068 *                                                                    01000001
                                     1069 *        VARIABLES AND CONSTANTS                                     01001001
                                     1070 *                                                                    01002001
00093A 0000
00093C 0000000000000000              1071 MCHSAV   DC    6F'0'                SAVE AREA FOR REGISTERS          01003001
                                     1072 *                                                                    01004001
                                     1073 ********************************************************************* 01005001
                                     1074 *                                                                    01006001
                                     1075 *        SEMICOLON COUNTER HANDLING                                  01007001
                                     1076 *                                                                    01008001
                                     1077 ********************************************************************* 01009001
                                     1078 *                                                                    01010001
                                     1079 * CALL    BAL R4,SCHDL                                                01011001
                                     1080 *                                                                    01012001
                                     1081 *        SET SEMICOLON COUNTER AND MOVE SOURCE POINTER IN SOURCE     01013001
                                     1082 *        STRING                                                      01014001
                                     1083 *                                                                    01015001
                                     1084 *        GENERATES SEMICOLON TRACE IF OPTION SPECIFIED               01016001
                                     1085 *                                                                    01017001
000954 5040 5938              00980  1086 SCHDL    ST    R4,SCHDLR            SAVE RETURN ADDR                 01018001
000958 D201 D09C 8001 0009C 00001    1087          MVC   SEMCNT,1(R8)         STORE SEMICOLON NUMBER           01019001
00095E 4188 0002              00002  1088          LA    R8,2(R8)             STEP SOURCE POINTER              01020001
                                     1089 *                                                                    01021001
                                     1090 *        GENERATE BRANCH TO TRACE ROUTINE                            01022001
                                     1091 *                                                                    01023001
000962 D201 5930 D09C 00978 0009C    1092          MVC   SCHDL1(2),SEMCNT     SEMICOLON NUM TO GENERATED CODE  01024001
000968 9104 D082        00082        1093          TM    COMPFLGS+2,NOTEST                                     01025001
00096C 4710 5932              0097A  1094          BO    SCHDL1+2             NO SEMICOLON TRACE GEN           01026001
000970 4520 55A6              005EE  1095          BAL   R2,GENTXT6                                            01027001
000974 45FD 0100              00100  1096          BAL   BRR,TRACE(FSA)       **GENERATED CODE**               01028001
000978 0000                          1097 SCHDL1   DC    H'0'                 **GENERATED CODE**               01029001
                                     1098 *                                                                    01030001
00097A 5840 5938              00980  1099          L     R4,SCHDLR                                             01031001
00097E 07F4                          1100          BR    R4                                                    01032001
                                     1101 *                                                                    01033001
000980 00000000                      1102 SCHDLR   DC    F'0'                 SAVE RETURN ADDR                 01034001
                                     1103 *                                                                    01035001
                                     1104 ********************************************************************* 01036001
                                     1105 *                                                                    01037001
                                     1106 *        ROUTINE NUMBER 1                                            01038001
                                     1107 *                                                                    01039001
                                     1108 ********************************************************************* 01040001
                                     1109 *                                                                    01041001
                                     1110 * CALL    BAL   R4,ROUTINE1                                           01042001
                                     1111 *                                                                    01043001
                                     1112 *        LOAD IN W-PLACE THE DISPLACEMENT OF AN OPERAND THAT IS      01044001
                                     1113 *        NOT AN ADDR                                                 01045001
                                     1114 *        LOAD IN V-PLACE AA OR 99 DEPENDING ON WHERE THE             01046001
                                     1115 *        VARIABLE, CONSTANT OR INTERMEDIATE RESULT IS AND            01047001
                                     1116 *        GENERATES A LOADING OF GDSA IF NECESSARY                    01048001
                                     1117 *                                                                    01049001
000984 D201 DA6A 9003 00A6A 00003    1118 ROUTINE1 MVC   WPLACE(2),3(R9)      MOVE DISPLACEMENT OF LO TO W     01050001
00098A 92AA DA72        00A72        1119 GPE2     MVI   VPLACE,X'AA'         MOVE CDSA REG TO V               01051001
00098E D500 9002 DA5D 00002 00A5D    1120          CLC   2(1,R9),SPBNST+1     PBN OF LO CDSA ?                 01052001
000994 0784                          1121          BER   R4                   YES, RETURN IF CURRENT DSA       01053001
000996 9299 DA72        00A72        1122 GPE3     MVI   VPLACE,X'99'         MOVE GLOBAL DSA REG TO V         01054001
00099A 95FF DA61        00A61        1123          CLI   GPBN+1,X'FF'         C(GDSA) DESTROYED ?              01055001
00099E 4780 598E              009D6  1124          BE    GPC3                 YES, BRANCH IF DESTROYED         01056001
0009A2 D500 DA60 9002 00A60 00002    1125          CLC   GPBN(1),2(R9)        GDSA = PBN OF LO                 01057001
0009A8 0784                          1126          BER   R4                   EQUAL, RETURN                    01058001
0009AA 1B11                          1127 GPC31    SR    R1,R1                CLEAR R1                         01059001
0009AC 5040 D57C              0057C  1128          ST    R4,RETADR+4          STORE RETURN ADDR                01060001
0009B0 D200 DA60 9002 00A60 00002    1129          MVC   GPBN(1),2(R9)        KEEP NEW LOADED GDSA             01061001
0009B6 4310 9002              00002  1130          IC    R1,2(,R9)            LOAD IN R1 PBN OF LO             01062001
0009BA 8B10 0003              00003  1131          SLA   R1,3                 MULTIPLY BY 8                    01063001
0009BE 4010 D5F8              005F8  1132          STH   R1,WORKPL            PREPARE INSTRUCTION              01064001
0009C2 D201 5986 D5F8 009CE 005F8    1133          MVC   GPC4+2(2),WORKPL                                      01065001
0009C8 4520 55A2              005EA  1134          BAL   R2,GENTXT4           GENERATE                         01066001
0009CC 589B 0000              00000  1135 GPC4     L     GDSA,0(PBT,0)                                         01067001
0009D0 5840 D57C              0057C  1136          L     R4,RETADR+4          LOAD RETURN ADDR                 01068001
0009D4 07F4                          1137          BR    R4                   RETURN                           01069001
                                     1138 *                                                                    01070001
0009D6 9200 DA61        00A61        1139 GPC3     MVI   GPBN+1,0             RECONSTRUCT GDSA                 01071001
0009DA 47F0 5962              009AA  1140          B     GPC31                                                 01072001
                                     1141 *                                                                    01073001
                                     1142 ********************************************************************* 01074001
                                     1143 *                                                                    01075001
                                     1144 *        ROUTINE NUMBER 2                                            01076001
                                     1145 *                                                                    01077001
                                     1146 ********************************************************************* 01078001
                                     1147 *                                                                    01079001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   1148 * CALL    BAL    R4,ROUTINE2                                              01080001
                                   1149 *                                                                         01081001
                                   1150 *         GENERATES A LOAD INSTRUCTION INTO THE FLOATING POINT            01082001
                                   1151 *         REGISTER SPECIFIED BY R14 OF AN OPERAND THAT IS AN ADDR         01083001
                                   1152 *         ADJUSTS THE OPERAND                                             01084001
                                   1153 *         STORES OPERAND STACK ADDR INTO RUTR                             01085001
                                   1154 *                                                                         01086001
0009DE 5040 D580            00580  1155 ROUTINE2 ST     R4,RETADR+8             STORE RETURN ADDR                 01087001
0009E2 4190 9005            00005  1156          LA     R9,5(,R9)               INCREASE R9                       01088001
0009E6 4540 59F2            00A3A  1157          BAL    R4,ROUTINE3             BRANCH TO ROUTINE NUMBER 3        01089001
0009EA 89E0 0001            00001  1158 GQE3     SLL    R14,1                   INTRODUCE R9 ADDR IN RUTR         01090001
0009EE 509E D5E4            005E4  1159          ST     R9,RUTR(R14)                                              01091001
0009F2 89E0 0003            00003  1160          SLL    R14,3                   PREPARE INSTRUCTION               01092001
0009F6 42E0 59C3            00A0B  1161          STC    R14,GQD3+1                                                01093001
0009FA D100 59C3 DA72 00A0B 00A72  1162          MVN    GQD3+1(1),VPLACE                                          01094001
000A00 D201 59C4 DA6A 00A0C 00A6A  1163          MVC    GQD3+2(2),WPLACE                                          01095001
000A06 4520 5594            005DC  1164          BAL    R2,GENTXTP4                                               01096001
000A0A 6800 0000            00000  1165 GQD3     LD     0,0(0,0)                ***GENERATE***                    01097001
000A0E 88E0 0004            00004  1166 GQF3     SRL    R14,4                                                     01098001
000A12 4B90 5170            001B8  1167          SH     R9,KH5                  REDUCE R9                         01099001
000A16 4070 D5F8            005F8  1168          STH    R7,WORKPL               INTROD R7 INTO R9 ENTRY           01100001
000A1A D201 9008 D5F8 00008 005F8  1169          MVC    8(2,R9),WORKPL                                            01101001
000A20 D300 9008 59C3 00008 00A0B  1170          MVZ    8(1,R9),GQD3+1          INTROD REG NUMBER                 01102001
000A26 D200 9007 DA5D 00007 00A5D  1171          MVC    7(1,R9),SPBNST+1        INTROD PBN                        01103001
000A2C 9680 9005      00005        1172          OI     5(R9),X'80'             ADJUST R9 ENTRY                   01104001
000A30 949F 9005      00005        1173          NI     5(R9),X'9F'                                               01105001
000A34 5840 D580            00580  1174          L      R4,RETADR+8             LOAD RETURN ADDR                  01106001
000A38 07F4                        1175          BR     R4                                                        01107001
                                   1176 *                                                                         01108001
                                   1177 ********************************************************************** 01109001
                                   1178 *                                                                         01110001
                                   1179 *         ROUTINE NUMBER 3                                                01111001
                                   1180 *                                                                         01112001
                                   1181 ********************************************************************** 01113001
                                   1182 *                                                                         01114001
                                   1183 * CALL    BAL    R4,ROUTINE3                                              01115001
                                   1184 *                                                                         01116001
                                   1185 *         LOAD IN W-PLACE ZERO                                            01117001
                                   1186 *         LOAD IN V-PLACE 88                                              01118001
                                   1187 *         GENERATE A LOADING OF ADR IF NECCESSARY, IN THIS CASE           01119001
                                   1188 *         THE OPERAND IS AN ADDR                                          01120001
                                   1189 *                                                                         01121001
000A3A 5040 D584            00584  1190 ROUTINE3 ST     R4,RETADR+12            STORE RETURN ADDR                 01122001
000A3E 9140 9000      00000        1191          TM     0(R9),X'40'             ADDR OF LO IN ADR ?               01123001
000A42 4710 5A16            00A5E  1192          BO     GRC3                    NO, NOT                           01124001
000A46 9200 DA46      00A46        1193          MVI    RII,0                   CLEAR RIT OF ADR                  01125001
000A4A 4B70 DA56            00A56  1194 GRE3     SH     R7,ONEENTRY             REDUCE R7 BY 8                    01126001
000A4E 9288 DA72      00A72        1195 GRG2     MVI    VPLACE,X'88'            V EQUAL ADR                       01127001
000A52 D201 DA6A DA50 00A6A 00A50  1196          MVC    WPLACE(2),ZEROHW        W EQUAL ZERO                      01128001
000A58 5840 D584            00584  1197          L      R4,RETADR+12            LOAD RETURN ADDR                  01129001
000A5C 07F4                        1198          BR     R4                      RET                               01130001
                                   1199 *                                                                         01131001
000A5E 9101 DA46      00A46        1200 GRC3     TM     RII,X'01'               ADR FREE ?                        01132001
000A62 4780 5A2A            00A72  1201          BZ     GRD31                   YES, BRANCH                       01133001
000A66 50E0 5A4C            00A94  1202 GRC4     ST     R14,RETADR3                                               01134001
000A6A 4540 5B46            00B8E  1203          BAL    R4,ROUTIN10                                               01135001
000A6E 58E0 5A4C            00A94  1204          L      R14,RETADR3                                               01136001
000A72 4540 593C            00984  1205 GRD31    BAL    R4,ROUTINE1             CALL ROUTINE1                     01137001
000A76 D201 5A40 DA6A 00A88 00A6A  1206          MVC    GRD3+2(2),WPLACE        MOVE DISPLACEMENT                 01138001
000A7C D100 5A3F DA72 00A87 00A72  1207          MVN    GRD3+1(1),VPLACE        MOVE BASE REG                     01139001
000A82 4520 55A2            005EA  1208          BAL    R2,GENTXT4              GENERATE                          01140001
000A86 5880 0000            00000  1209 GRD3     L      ADR,0(0,0)              ***GENERATE***                    01141001
000A8A 5090 D5E0            005E0  1210          ST     R9,RUTI+32                                                01142001
000A8E 47F0 5A02            00A4A  1211          B      GRE3                                                      01143001
                                   1212 *                                                                         01144001
000A92 0000
000A94 00000000                    1213 RETADR3  DC     F'0'                                                      01145001
                                   1214 *                                                                         01146001
                                   1215 ********************************************************************** 01147001
                                   1216 *                                                                         01148001
                                   1217 *         ROUTINE NUMBER 4                                                01149001
                                   1218 *                                                                         01150001
                                   1219 ********************************************************************** 01151001
                                   1220 *                                                                         01152001
                                   1221 * CALL    BAL    R4,ROUTINE4                                              01153001
                                   1222 *                                                                         01154001
                                   1223 *         GENERATES A LOAD INSTRUCTION INTO THE FLOATING POINT            01155001
                                   1224 *         REGISTER SPECIFIED BY R14 OF AN OPERAND THAT IS NOT AN ADDR     01156001
                                   1225 *         ADJUSTS THE OPERAND AND STORES THE OPERAND STACK ADDR           01157001
                                   1226 *         INTO RUTR                                                       01158001
                                   1227 *                                                                         01159001
000A98 5040 D580            00580  1228 ROUTINE4 ST     R4,RETADR+8             STORE RETURN ADDR                 01160001
000A9C 4190 9005            00005  1229          LA     R9,5(,R9)               INCREASE R9                       01161001
000AA0 4540 593C            00984  1230          BAL    R4,ROUTINE1             CALL ROUTINE NUMBER 1             01162001
000AA4 9630 9001      00001        1231          OI     1(R9),X'30'             SET TO VARIABLE                   01163001
000AA8 47F0 59A2            009EA  1232          B      GQE3                    BRANCH TO ENTRY PT IN RTN NO 2    01164001
                                   1233 *                                                                         01165001
                                   1234 ********************************************************************** 01166001
                                   1235 *                                                                         01167001
                                   1236 *         ROUTINE NUMBER 5                                                01168001
                                   1237 *                                                                         01169001
                                   1238 ********************************************************************** 01170001
                                   1239 *                                                                         01171001
                                   1240 * CALL    BAL    R4,ROUTINE5                                              01172001
                                   1241 *                                                                         01173001
                                   1242 *         GENERATES A LOAD INSTRUCTION INTO A GENERAL PURPOSE             01174001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.13

                                   1243 *        REGISTER SPECIFIED BY R14 OF AN OPERAND THAT IS NOT AN ADDR      01175001
                                   1244 *        ADJUSTS THE OPERAND AND STORES THE OPERAND STACK ADDR            01176001
                                   1245 *        INTO RUTI                                                        01177001
                                   1246 *                                                                         01178001
000AAC 5040 D580            00580  1247 ROUTINE5 ST    R4,RETADR+8              STORE RETURN ADDR                01179001
000AB0 4190 9005            00005  1248          LA    R9,5(,R9)                INCREASE R9                      01180001
000AB4 4540 593C            00984  1249          BAL   R4,ROUTINE1              CALL ROUTINE NUMBER 1            01181001
000AB8 9630 9001      00001        1250          OI    1(R9),X'30'              SET TO VARIABLE                  01182001
000ABC 89E0 0002            00002  1251 GTE3     SLL   R14,2                    INTRODUCE R9 ADDR IN RUTI        01183001
000AC0 509E D5C0            005C0  1252          ST    R9,RUTI(R14)                                              01184001
000AC4 89E0 0002            00002  1253          SLL   R14,2                    PREPARE INSTRUCTION              01185001
000AC8 42E0 5A99            00AE1  1254          STC   R14,GTD3+1                                                01186001
000ACC 42E0 59C3            00A0B  1255          STC   R14,GQD3+1                                                01187001
000AD0 D100 5A99 DA72 00AE1 00A72  1256          MVN   GTD3+1(1),VPLACE                                          01188001
000AD6 D201 5A9A DA6A 00AE2 00A6A  1257          MVC   GTD3+2(2),WPLACE                                          01189001
000ADC 4520 55A2            005EA  1258          BAL   R2,GENTXT4                                                01190001
000AE0 5800 0000            00000  1259 GTD3     L     0,0(0,0)                 ***GENERATE***                   01191001
000AE4 47F0 59C6            00A0E  1260          B     GQF3                     BRANCH TO ENTRY PT IN RTN NO 2   01192001
                                   1261 *                                                                         01193001
                                   1262 ********************************************************************** 01194001
                                   1263 *                                                                         01195001
                                   1264 *        ROUTINE NUMBER 6                                                 01196001
                                   1265 *                                                                         01197001
                                   1266 ********************************************************************** 01198001
                                   1267 *                                                                         01199001
                                   1268 * CALL   BAL   R4,ROUTINE6                                                 01200001
                                   1269 *                                                                         01201001
                                   1270 *        GENERATES A LOAD INSTRUCTION INTO A GENRAL PURPOSE               01202001
                                   1271 *        REGISTER SPECIFIED BY R14 OF AN OPERAND THAT IS AN ADDR          01203001
                                   1272 *        ADJUSTS THE OPERAND AND STORES THE OPERAND STACK ADDR            01204001
                                   1273 *        INTO RUTI                                                        01205001
                                   1274 *                                                                         01206001
000AE8 5040 D580            00580  1275 ROUTINE6 ST    R4,RETADR+8              STORE RETURN ADDR                01207001
000AEC 4190 9005            00005  1276          LA    R9,5(,R9)                INCREASE R9                      01208001
000AF0 4540 59F2            00A3A  1277          BAL   R4,ROUTINE3              CALL ROUTINE NUMBER 3            01209001
000AF4 47F0 5A74            00ABC  1278          B     GTE3                     BRANCH TO ENTRY PT IN RTN NO 5   01210001
                                   1279 *                                                                         01211001
                                   1280 ********************************************************************** 01212001
                                   1281 *                                                                         01213001
                                   1282 *        ROUTINE NUMBER 7                                                 01214001
                                   1283 *                                                                         01215001
                                   1284 ********************************************************************** 01216001
                                   1285 *                                                                         01217001
                                   1286 * CALL   BAL   R4,ROUTINE7                                                 01218001
                                   1287 *                                                                         01219001
                                   1288 *        LOADS INTO R14 THE NUMBER OF THE NEXT GENERAL PURPOSE            01220001
                                   1289 *        REGISTER TO BE USED ACCORDING TO CII                             01221001
                                   1290 *        IF IT IS OCCUPIED IT BRANCHES TO ROUTINE NUMBER 9 THAT           01222001
                                   1291 *        GENERATES A STORE INSTRUCTION                                    01223001
                                   1292 *        CII AND RII ARE SET                                              01224001
                                   1293 *        RESERVES ONE OBJECT TIME STACK ENTRY                             01225001
                                   1294 *                                                                         01226001
000AF8 1BEE                        1295 ROUTINE7 SR    R14,R14                                                   01227001
000AFA 9507 DA43      00A43        1296          CLI   CII+1,X'07'              CII IS 7 ?                       01228001
000AFE 4780 5AC2            00B0A  1297          BE    GVC2                     YES, BRANCH                      01229001
000B02 43E0 DA43            00A43  1298          IC    R14,CII+1(0)             INCREASE CII BY ONE              01230001
000B06 41E0 E001            00001  1299          LA    R14,1(,R14)                                               01231001
000B0A 42E0 DA43            00A43  1300 GVC2     STC   R14,CII+1                                                 01232001
000B0E 41F0 0001            00001  1301          LA    R15,1                    LOAD ONE INTO R15                01233001
000B12 89F0 E000            00000  1302          SLL   R15,0(R14)               GENERATE MASK                    01234001
000B16 42F0 5AD3            00B1B  1303          STC   R15,GVC21+1                                               01235001
000B1A 9100 DA47      00A47        1304 GVC21    TM    RII+1,0                  GPR OCCUPIED ?                   01236001
000B1E 4780 5AE6            00B2E  1305          BZ    GVE2                     NO, BRANCH                       01237001
000B22 5040 D594            00594  1306          ST    R4,RETADR+28             STORE RETURN ADDR                01238001
000B26 4540 5B4E            00B96  1307          BAL   R4,ROUTINE9              CALL ROUTINE9                    01239001
000B2A 5840 D594            00594  1308          L     R4,RETADR+28             LOAD RETURN ADDR                 01240001
000B2E D600 DA47 5AD3 00A47 00B1B  1309 GVE2     OC    RII+1(1),GVC21+1         SET TO ONE RII                   01241001
000B34 4A70 DA56            00A56  1310 GVF2     AH    R7,ONEENTRY              INCREASE R7 BY 4 OR 8            01242001
000B38 07F4                        1311          BR    R4                                                        01243001
                                   1312 *                                                                         01244001
                                   1313 ********************************************************************** 01245001
                                   1314 *                                                                         01246001
                                   1315 *        ROUTINE NUMBER 8                                                 01247001
                                   1316 *                                                                         01248001
                                   1317 ********************************************************************** 01249001
                                   1318 *                                                                         01250001
                                   1319 * CALL   BAL   R4,ROUTINE8                                                 01251001
                                   1320 *                                                                         01252001
                                   1321 *        THE LAST GENERAL PURPOSE REGISTER RESERVED IS RELEASED           01253001
                                   1322 *        CII AND RII ARE SET                                              01254001
                                   1323 *        ONE OBJECT STACK ENTRY IS RELEASED                               01255001
                                   1324 *                                                                         01256001
000B3A 1BEE                        1325 ROUTINE8 SR    R14,R14                  CLEAR R14                        01257001
000B3C 43E0 DA43            00A43  1326          IC    R14,CII+1                LOAD CII INTO R14                01258001
000B40 41F0 0001            00001  1327          LA    R15,1                    CLEAR RII OF LO                  01259001
000B44 89F0 E000            00000  1328          SLL   R15,0(R14)                                                01260001
000B48 42F0 5B09            00B51  1329          STC   R15,GWD51+1                                               01261001
000B4C 97FF 5B09      00B51        1330          XI    GWD51+1,X'FF'                                             01262001
000B50 9400 DA47      00A47        1331 GWD51    NI    RII+1,0                                                   01263001
000B54 4B70 DA56            00A56  1332          SH    R7,ONEENTRY              REDUCE R7                        01264001
000B58 9500 DA43      00A43        1333 GWD5     CLI   CII+1,0                  CII = ZERO                       01265001
000B5C 4780 5B30            00B78  1334          BE    GWD3                     YES, BRANCH                      01266001
000B60 06E0                        1335          BCTR  R14,0                    REDUCE BY ONE                    01267001
000B62 42E0 DA43            00A43  1336          STC   R14,CII+1                STORE NEW CII                    01268001
000B66 88F0 0001            00001  1337          SRL   R15,1                    GPR INDICATED BY                 01269001
000B6A 42F0 5B27            00B6F  1338 GWD6     STC   R15,GWD4+1               CII FREE                         01270001
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  Active USINGs: IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

000B6E 9100 DA47        00A47        1339 GWD4     TM    RII+1,0                                           01271001
000B72 4780 5B10              00B58  1340          BZ    GWD5              FREE, BRANCH                    01272001
000B76 07F4                          1341          BR    R4                RETURN                          01273001
                                     1342 *                                                                01274001
000B78 9207 DA43        00A43        1343 GWD3     MVI   CII+1,X'07'       MAKE CII = 7                    01275001
000B7C 41E0 0007              00007  1344          LA    R14,7                                             01276001
000B80 9500 DA47        00A47        1345          CLI   RII+1,0           ALL GPR FREE ?                  01277001
000B84 0784                          1346          BER   R4                YES, RETURN                     01278001
000B86 41F0 0080              00080  1347          LA    R15,128           LOAD MASK                       01279001
000B8A 47F0 5B22              00B6A  1348          B     GWD6                                              01280001
                                     1349 *                                                                01281001
                                     1350 ********************************************************************** 01282001
                                     1351 *                                                                01283001
                                     1352 *        ROUTINE NUMBER 10                                       01284001
                                     1353 *                                                                01285001
                                     1354 ********************************************************************** 01286001
                                     1355 *                                                                01287001
                                     1356 * CALL    BAL   R4,ROUTIN10                                       01288001
                                     1357 *                                                                01289001
                                     1358 *        CLEARS RII OF ADR                                       01290001
                                     1359 *        LOADS 8 INTO R14                                        01291001
                                     1360 *        FALLS THROUGH TO ROUTINE NUMBER 9                       01292001
                                     1361 *                                                                01293001
000B8E 9200 DA46        00A46        1362 ROUTIN10 MVI   RII,X'00'                                         01294001
000B92 48E0 5172              001BA  1363          LH    R14,KH8                                           01295001
                                     1364 *                                                                01296001
                                     1365 ********************************************************************** 01297001
                                     1366 *                                                                01298001
                                     1367 *        ROUTINE NUMBER 9                                        01299001
                                     1368 *                                                                01300001
                                     1369 ********************************************************************** 01301001
                                     1370 *                                                                01302001
                                     1371 * CALL    BAL   R4,ROUTINE9                                       01303001
                                     1372 *                                                                01304001
                                     1373 *        GENERATE CODE TO STORE GENERAL PURPOSE REGISTER         01305001
                                     1374 *        SPECIFIED BY R14 IF THE PBN IS NOT ZERO                 01306001
                                     1375 *        IF THE PBN IS ZERO IT GENERATES A MOVE INSTRUCTION      01307001
                                     1376 *        THE OPERAND IS ADJUSTED                                 01308001
                                     1377 *                                                                01309001
000B96 5040 D59C              0059C  1378 ROUTINE9 ST    R4,RETADR+36      STORE RETURN ADDR               01310001
000B9A 89E0 0002              00002  1379          SLL   R14,2             MULTIPLY BY 4                   01311001
000B9E 41F0 D5C0              005C0  1380          LA    R15,RUTI          LOAD ADDR OF RUTI               01312001
000BA2 58FE F000              00000  1381          L     R15,0(R14,R15)    LOAD ADDR OF OPD TO STORE       01313001
000BA6 89E0 0002              00002  1382          SLL   R14,2             PREPARE INSTRUCTION             01314001
000BAA 940F F003        00003        1383          NI    3(R15),X'0F'                                      01315001
000BAE 50F0 D5A8              005A8  1384          ST    R15,RETADR+48                                     01316001
000BB2 91FF F002        00002        1385          TM    2(R15),X'FF'                                      01317001
000BB6 4780 5B8C              00BD4  1386          BZ    GXC4                                              01318001
000BBA 41E0 E00A              0000A  1387          LA    R14,10(,R14)                                      01319001
000BBE 42E0 5B85              00BCD  1388          STC   R14,GXC3+1                                        01320001
000BC2 D201 5B86 F003 00BCE 00003    1389          MVC   GXC3+2(2),3(R15)  PREPARE INSTRUCTION             01321001
000BC8 4520 55A2              005EA  1390          BAL   R2,GENTXT4                                        01322001
000BCC 500A 0000              00000  1391 GXC3     ST    0,0(CDSA,0)       ***GENERATE***                  01323001
000BD0 47F0 5C98              00CE0  1392          B     HBC2                                              01324001
                                     1393 *                                                                01325001
000BD4 D201 5BB6 F003 00BFE 00003    1394 GXC4     MVC   GXC5+2(2),3(R15)                                  01326001
000BDA 96A0 5BB6        00BFE        1395          OI    GXC5+2,X'A0'                                      01327001
000BDE 9207 5BB5        00BFD        1396          MVI   GXC5+1,X'07'                                      01328001
000BE2 9102 D080        00080        1397          TM    COMPFLGS,LNG                                      01329001
000BE6 4710 5BA6              00BEE  1398          BO    GXC6                                              01330001
000BEA 9203 5BB5        00BFD        1399          MVI   GXC5+1,X'03'                                      01331001
000BEE 94DF F000        00000        1400 GXC6     NI    0(R15),X'DF'                                      01332001
000BF2 D200 F002 DA5D 00002 00A5D    1401          MVC   2(1,R15),SPBNST+1                                 01333001
000BF8 4520 55A6              005EE  1402          BAL   R2,GENTXT6                                        01334001
000BFC D203 A000 8000 00000 00000    1403 GXC5     MVC   0(4,CDSA),0(ADR)  *** GENERATE ***                01335001
000C02 47F0 5C98              00CE0  1404          B     HBC2                                              01336001
                                     1405 *                                                                01337001
                                     1406 ********************************************************************** 01338001
                                     1407 *                                                                01339001
                                     1408 *        ROUTINE NUMBER 11                                       01340001
                                     1409 *                                                                01341001
                                     1410 ********************************************************************** 01342001
                                     1411 *                                                                01343001
                                     1412 * CALL    BAL   R4,ROUTIN11                                       01344001
                                     1413 *                                                                01345001
                                     1414 *        LOADS INTO R14 THE NUMBER OF THE NEXT FLOATING POINT    01346001
                                     1415 *        REGISTER TO BE USED ACCORDING TO CIR                    01347001
                                     1416 *        IF IT IS OCCUPIED IT CALLS ROUTINE NUMBER 13 THAT       01348001
                                     1417 *        GENERATES A STORE INSTRUCTION                           01349001
                                     1418 *        CIR AND RIR ARE SET                                     01350001
                                     1419 *        ONE OBJECT TIME ENTRY IS RESERVED                       01351001
                                     1420 *                                                                01352001
000C06 1BEE                          1421 ROUTIN11 SR    R14,R14           CLEAR R14                       01353001
000C08 9506 DA45        00A45        1422          CLI   CIR+1,X'06'       CIR = 6 ?                       01354001
000C0C 4780 5BD0              00C18  1423          BE    GZC2              YES, BRANCH                     01355001
000C10 43E0 DA45              00A45  1424          IC    R14,CIR+1         LOAD CIR INTO R14               01356001
000C14 41E0 E002              00002  1425          LA    R14,2(,R14)       INCR CIR BY 2                   01357001
000C18 40E0 DA44              00A44  1426 GZC2     STH   R14,CIR           STORE NEW CIR                   01358001
000C1C 88E0 0001              00001  1427          SRL   R14,1             DIVIDE R14 BY 2                 01359001
000C20 41F0 0001              00001  1428          LA    R15,1             LOAD ONE INTO R15               01360001
000C24 89F0 E000              00000  1429          SLL   R15,0(R14)        GENERATE MASK                   01361001
000C28 89E0 0001              00001  1430          SLL   R14,1                                             01362001
000C2C 42F0 5BE9              00C31  1431          STC   R15,GZC21+1                                       01363001
000C30 9100 DA49        00A49        1432 GZC21    TM    RIR+1,0           FPR OCCUPIED ?                  01364001
000C34 4780 5BFC              00C44  1433          BZ    GZE2              FREE, BRANCH                    01365001
000C38 5040 D5A4              005A4  1434          ST    R4,RETADR+44      STORE RETURN ADDR               01366001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000C3C 4540 5C66            00CAE  1435          BAL   R4,ROUTIN13          CALL ROUTIN13               01367001
000C40 5840 D5A4            005A4  1436          L     R4,RETADR+44         LOAD RETURN ADDR            01368001
000C44 D600 DA49 5BE9 00A49 00C31  1437 GZE2     OC    RIR+1(1),GZC21+1                                 01369001
000C4A 4A70 DA56            00A56  1438 GZF2     AH    R7,ONEENTRY          INCREASE R7 BY 4 OR 8       01370001
000C4E 07F4                        1439          BR    R4                                               01371001
                                   1440 *                                                               01372001
                                   1441 *********************************************************************** 01373001
                                   1442 *                                                               01374001
                                   1443 *        ROUTINE NUMBER 12                                      01375001
                                   1444 *                                                               01376001
                                   1445 *********************************************************************** 01377001
                                   1446 *                                                               01378001
                                   1447 * CALL   BAL   R4,ROUTIN12                                      01379001
                                   1448 *                                                               01380001
                                   1449 *        THE LAST FLOATING POINT REGISTER RESERVED IS RELEASED  01381001
                                   1450 *        CIR AND RIR ARE SET                                    01382001
                                   1451 *        ONE OBJECT STACK ENTRY IS RELEASED                     01383001
                                   1452 *                                                               01384001
000C50 48E0 DA44            00A44  1453 ROUTIN12 LH    R14,CIR              LOAD INTO R14 CIR           01385001
000C54 41F0 0001            00001  1454          LA    R15,1                CLEAR RIR OF BLO            01386001
000C58 88E0 0001            00001  1455          SRL   R14,1                                            01387001
000C5C 89F0 E000            00000  1456          SLL   R15,0(R14)                                       01388001
000C60 42F0 5C21            00C69  1457          STC   R15,HAD4+1                                       01389001
000C64 97FF 5C21      00C69        1458          XI    HAD4+1,X'FF'                                     01390001
000C68 9400 DA49      00A49        1459 HAD4     NI    RIR+1,0                                          01391001
000C6C 4B70 DA56            00A56  1460          SH    R7,ONEENTRY          REDUCE R7                   01392001
000C70 89E0 0001            00001  1461          SLL   R14,1                                            01393001
000C74 9500 DA45      00A45        1462 HAD1     CLI   CIR+1,0              ZERO ?                      01394001
000C78 4780 5C4E            00C96  1463          BE    HAD3                 YES, BRANCH                 01395001
000C7C 4BE0 516C            001B4  1464          SH    R14,KH2                                          01396001
000C80 42E0 DA45            00A45  1465          STC   R14,CIR+1                                        01397001
000C84 88F0 0001            00001  1466          SRL   R15,1                                            01398001
000C88 42F0 5C45            00C8D  1467 HAD0     STC   R15,HAD2+1                                       01399001
000C8C 9100 DA49      00A49        1468 HAD2     TM    RIR+1,0                                          01400001
000C90 4780 5C2C            00C74  1469          BZ    HAD1                                             01401001
000C94 07F4                        1470          BR    R4                                               01402001
                                   1471 *                                                               01403001
000C96 9206 DA45      00A45        1472 HAD3     MVI   CIR+1,X'06'          SET CIR = 6                 01404001
000C9A 48E0 DA44            00A44  1473          LH    R14,CIR                                          01405001
000C9E 9500 DA49      00A49        1474          CLI   RIR+1,0              ZERO ?                      01406001
000CA2 0784                        1475          BER   R4                   YES, BRANCH                 01407001
000CA4 41F0 0008            00008  1476          LA    R15,8                                            01408001
000CA8 47F0 5C40            00C88  1477          B     HAD0                                             01409001
                                   1478 *                                                               01410001
                                   1479 *********************************************************************** 01411001
                                   1480 *                                                               01412001
                                   1481 *        ROUTINE NUMBER 14                                      01413001
                                   1482 *                                                               01414001
                                   1483 *********************************************************************** 01415001
                                   1484 *                                                               01416001
                                   1485 * CALL   BAL   R4,ROUTIN14                                      01417001
                                   1486 *                                                               01418001
                                   1487 *        LOAD ZERO INTO R14                                     01419001
                                   1488 *        FALL THROUGH TO ROUTINE NUMBER 13                      01420001
                                   1489 *                                                               01421001
000CAC 1BEE                        1490 ROUTIN14 SR    R14,R14                                          01422001
                                   1491 *                                                               01423001
                                   1492 *********************************************************************** 01424001
                                   1493 *                                                               01425001
                                   1494 *        ROUTINE NUMBER 13                                      01426001
                                   1495 *                                                               01427001
                                   1496 *********************************************************************** 01428001
                                   1497 *                                                               01429001
                                   1498 *        GENERATE CODE TO STORE FLOATING POINT REGISTER         01430001
                                   1499 *        SPECIFIED BY R14                                       01431001
                                   1500 *        THE OPERAND IS ADJUSTED                                01432001
                                   1501 *                                                               01433001
000CAE 5040 D59C            0059C  1502 ROUTIN13 ST    R4,RETADR+36         STORE RETURN ADDR           01434001
000CB2 89E0 0001            00001  1503          SLL   R14,1                MULTIPLY R14 BY 2           01435001
000CB6 41F0 D5E4            005E4  1504          LA    R15,RUTR             LOAD ADDR OF RUTR           01436001
000CBA 58FE F000            00000  1505          L     R15,0(R14,R15)       LOAD R9 ADDR OF OPERAND     01437001
000CBE 89E0 0003            00003  1506          SLL   R14,3                SHIFT REG NO TO OREOARE INSTRUC 01438001
000CC2 41E0 E00A            0000A  1507          LA    R14,10(,R14)         INTRODUCE CDSA              01439001
000CC6 42E0 5C95            00CDD  1508          STC   R14,HBC3+1                                       01440001
000CCA 940F F003      00003        1509          NI    3(R15),X'0F'                                     01441001
000CCE D201 5C96 F003 00CDE 00003  1510          MVC   HBC3+2(2),3(R15)                                 01442001
000CD4 50F0 D5A8            005A8  1511          ST    R15,RETADR+48                                    01443001
000CD8 4520 5594            005DC  1512          BAL   R2,GENTXTP4                                      01444001
000CDC 600A 0000            00000  1513 HBC3     STD   0,0(CDSA,0)          *** GENERATE ***            01445001
000CE0 58F0 D5A8            005A8  1514 HBC2     L     R15,RETADR+48                                    01446001
000CE4 97C0 F000      00000        1515          XI    0(R15),X'C0'                                     01447001
000CE8 D201 D5F8 F003 005F8 00003  1516          MVC   WORKPL(2),3(R15)                                 01448001
000CEE 4540 58BA            00902  1517          BAL   R4,MAXCH                                         01449001
000CF2 88E0 0004            00004  1518          SRL   R14,4                                            01450001
000CF6 5840 D59C            0059C  1519          L     R4,RETADR+36         LOAD RETURN ADDR            01451001
000CFA 07F4                        1520          BR    R4                   RETURN                      01452001
                                   1521 *                                                               01453001
                                   1522 *********************************************************************** 01454001
                                   1523 *                                                               01455001
                                   1524 *        ROUTINE NUMBER 15                                      01456001
                                   1525 *                                                               01457001
                                   1526 *********************************************************************** 01458001
                                   1527 *                                                               01459001
                                   1528 * CALL   BAL   R4,ROUTIN15                                      01460001
                                   1529 *                                                               01461001
                                   1530 *        IF THE OPERAND IS AN ADDR BRANCH TO ROUTINE NUMBER 3   01462001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   1531 *       IF THE OPERAND IS NOT AN ADDR AND IS IN A REGISTER GET           01463001
                                   1532 *       THE REGISTER NUMBER TO V-PLACE, ELSE IT BRANCHES TO              01464001
                                   1533 *       ROUTINE NUMBER 1                                                 01465001
                                   1534 *                                                                        01466001
000CFC 9120 9000      00000        1535 ROUTIN15 TM    0(R9),X'20'                                               01467001
000D00 4710 59F2            00A3A  1536          BO    ROUTINE3                                                  01468001
000D04 9140 9000      00000        1537          TM    0(R9),X'40'                                               01469001
000D08 4780 5CD4            00D1C  1538          BZ    ROUT151                                                   01470001
000D0C 9180 9000      00000        1539          TM    0(R9),X'80'                                               01471001
000D10 4710 593C            00984  1540          BO    ROUTINE1                                                  01472001
000D14 4B70 DA56            00A56  1541          SH    R7,ONEENTRY                                               01473001
000D18 47F0 593C            00984  1542          B     ROUTINE1                                                  01474001
                                   1543 *                                                                        01475001
000D1C 43F0 9003            00003  1544 ROUT151  IC    R15,3(,R9)             GET                                01476001
000D20 88F0 0004            00004  1545          SRL   R15,4                      REG                            01477001
000D24 42F0 DA72            00A72  1546          STC   R15,VPLACE                     NUMBER                     01478001
000D28 D300 DA72 9003 00A72 00003  1547          MVZ   VPLACE(1),3(R9)                 TO VPLACE                 01479001
000D2E 07F3                        1548          BR    R3                     RETURN                             01480001
                                   1549 *                                                                        01481001
                                   1550 ********************************************************************** 01482001
                                   1551 *                                                                        01483001
                                   1552 *       DECOMP                                                           01484001
                                   1553 *                                                                        01485001
                                   1554 ********************************************************************** 01486001
                                   1555 *                                                                        01487001
                                   1556 * CALL  BAL   R4,DECOMP                                                  01488001
                                   1557 *                                                                        01489001
                                   1558 *       DECOMPOSE OPERAND BY MOVING ITS PARTS INTO LOW ENDS OF           01490001
                                   1559 *       HALFWORDS                                                        01491001
                                   1560 *                                                                        01492001
000D30 D200 DA4B 9002 00A4B 00002  1561 DECOMP   MVC   OPDPBN+1(1),2(R9)      MOVE PBN                           01493001
000D36 D201 DA4C 9003 00A4C 00003  1562          MVC   OPDADR(2),3(R9)        MOVE ADDR                          01494001
000D3C 4810 DA4C            00A4C  1563          LH    R1,OPDADR                                                 01495001
000D40 5410 5198            001E0  1564          N     R1,HEXFFF                                                 01496001
000D44 4010 DA4E            00A4E  1565          STH   R1,OPDLN               LABEL NUMBER                       01497001
000D48 07F4                        1566          BR    R4                                                        01498001
                                   1567 *                                                                        01499001
                                   1568 ********************************************************************** 01500001
                                   1569 *                                                                        01501001
                                   1570 *       STACKAPI                                                         01502001
                                   1571 *                                                                        01503001
                                   1572 ********************************************************************** 01504001
                                   1573 *                                                                        01505001
                                   1574 * CALL  BAL   R4,STACKAPI                                                01506001
                                   1575 *                                                                        01507001
                                   1576 *       STACK ALL PURPOSE IDENTIFIER (API)                               01508001
                                   1577 *                                                                        01509001
000D4A 4B90 5170            001B8  1578 STACKAPI SH    R9,KH5                                                    01510001
000D4E 19A9                        1579          CR    R10,R9                                                    01511001
000D50 47B0 53E0            00428  1580          BNL   STACKOFL                                                  01512001
000D54 D204 9000 5182 00000 001CA  1581          MVC   0(5,R9),API                                               01513001
000D5A 07F4                        1582          BR    R4                                                        01514001
                                   1583 *                                                                        01515001
                                   1584 ********************************************************************** 01516001
                                   1585 *                                                                      * 01517001
                                   1586 *       PROGRAM BLOCK NUMBER HANDLING                                  * 01518001
                                   1587 *                                                                      * 01519001
                                   1588 ********************************************************************** 01520001
                                   1589 *                                                                        01521001
                                   1590 * CALL  BAL   R4,PBNHDL                                                  01522001
                                   1591 *                                                                        01523001
                                   1592 *       PROGRAM BLOCK NUMBER HANDLING INSERTS NEW PBN IN                 01524001
                                   1593 *       WORKAREA, SPBNST                                                 01525001
                                   1594 *       SAVE R7 IN PBTAB2                                                01526001
                                   1595 *       INSERT NEW OBJECT TIME STACK POINTER VALUE TO R7                 01527001
                                   1596 *                                                                        01528001
000D5C 1B22                        1597 PBNHDL   SR    R2,R2                                                     01529001
000D5E 4320 8003            00003  1598          IC    R2,3(,R8)                                                 01530001
000D62 950D 8000      00000        1599          CLI   0(R8),X'0D'            SOURCE OPERATOR BETA ?             01531001
000D66 4780 5D2A            00D72  1600          BE    PBNHDL1                YES                                01532001
000D6A 952A 8000      00000        1601          CLI   0(R8),X'2A'            SOURCE OPERATOR EPSILON ?          01533001
000D6E 4770 5D32            00D7A  1602          BNE   PBNHDL2                NO                                 01534001
                                   1603 *                                     (=BRANCH IF OPTR IS PI OR PHI)     01535001
                                   1604 *                                                                        01536001
                                   1605 *       OPERATOR IS BETA OR EPSILON                                      01537001
                                   1606 *                                                                        01538001
000D72 4320 8001            00001  1607 PBNHDL1  IC    R2,1(,R8)                                                 01539001
000D76 4180 8001            00001  1608          LA    R8,1(,R8)                                                 01540001
000D7A 4810 DA5C            00A5C  1609 PBNHDL2  LH    R1,SPBNST              STORE                              01541001
000D7E 8910 0001            00001  1610          SLL   R1,1                   OLD                                01542001
000D82 4071 D278            00278  1611          STH   R7,PBTAB2(R1)          P-VALUE                            01543001
000D86 4220 DA5D            00A5D  1612          STC   R2,SPBNST+1            INSERT NEW PBN                     01544001
000D8A 8920 0001            00001  1613          SLL   R2,1                   GET DISP IN PBTAB2                 01545001
000D8E 4872 D278            00278  1614          LH    R7,PBTAB2(R2)          LOAD NEW P VALUE                   01546001
000D92 9180 D080      00080        1615          TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?                01547001
000D96 0714                        1616          BOR   R4                     YES, RETURN                        01548001
000D98 47F0 5706            0074E  1617          B     CLEARRG                CLEAR REGISTERS RETURN DIRECT      01549001
                                   1618 *                                                                        01550001
                                   1619 ********************************************************************** 01551001
                                   1620 *                                                                        01552001
                                   1621 *       PLPRST - PARAMETERLESS PROCEDURE STATEMENT HANDLING              01553001
                                   1622 *                                                                        01554001
                                   1623 ********************************************************************** 01555001
                                   1624 *                                                                        01556001
                                   1625 * CALL  BAL   R4,PLPRST                                                  01557001
                                   1626 *                                                                        01558001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   1627 *       CHECKS THAT OPERAND IS A PARAMETERLESS PROCEDURE             01559001
                                   1628 *                                                                    01560001
000D9C 5040 D624            00624  1629 PLPRST  ST    R4,STRETURN           SAVE RETURN ADDR             01561001
000DA0 4540 5CE8            00D30  1630         BAL   R4,DECOMP             DECOMPOSE OPERAND            01562001
000DA4 91C0 9001      00001        1631         TM    1(R9),X'C0'           PROCEDURE IDENTIFIER ?       01563001
000DA8 4780 5D7C            00DC4  1632         BZ    PLPRST4               NO, ERROR                    01564001
000DAC 4840 DA4C            00A4C  1633         LH    R4,OPDADR                                          01565001
000DB0 8840 000C            0000C  1634         SRL   R4,12                 GET NUMBER OF PARAMETERS     01566001
000DB4 1244                        1635         LTR   R4,R4                 NUMBER ZERO ?                01567001
000DB6 4780 5D86            00DCE  1636         BZ    PLPRST1               YES, BRANCH                  01568001
000DBA 4540 5380            003C8  1637 PLPRST0 BAL   R4,SERR1              ERROR                        01569001
000DBE 00BB                        1638         DC    H'187'                                             01570001
                                   1639 *                                                                    01571001
000DC0 47F0 5DA2            00DEA  1640         B     PLPRST3                                            01572001
                                   1641 *                                                                    01573001
000DC4 4540 5318            00360  1642 PLPRST4 BAL   R4,SERR3              ERROR                        01574001
000DC8 00B7                        1643         DC    H'183'                                             01575001
                                   1644 *                                                                    01576001
000DCA 47F0 5DA2            00DEA  1645         B     PLPRST3                                            01577001
                                   1646 *                                                                    01578001
000DCE 9180 D080      00080        1647 PLPRST1 TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?          01579001
000DD2 4710 5DA2            00DEA  1648         BO    PLPRST3               YES, BRANCH                  01580001
000DD6 4540 578A            007D2  1649         BAL   R4,OPDREC             OPERAND RECOGNIZER           01581001
000DDA 9180 9003      00003        1650         TM    3(R9),REGADRM         OPERAND IN ADR               01582001
000DDE 4780 5DA2            00DEA  1651         BZ    PLPRST3               NO                           01583001
000DE2 4B70 DA56            00A56  1652         SH    R7,ONEENTRY           RELEASE STACK                01584001
000DE6 9701 DA46      00A46        1653         XI    RII,RIIADRM           ADR NOT OCCUPIED             01585001
000DEA 5840 D624            00624  1654 PLPRST3 L     R4,STRETURN           LOAD RETURN ADDR             01586001
000DEE 07F4                        1655         BR    R4                                                 01587001
                                   1656 *                                                                    01588001
                                   1657 ********************************************************************** 01589001
                                   1658 *                                                                    01590001
                                   1659 *       SUBROUTINE - LOAD VPLACE, WPLACE                             01591001
                                   1660 *                                                                    01592001
                                   1661 ********************************************************************** 01593001
                                   1662 *                                                                    01594001
                                   1663 * CALL  BAL   R4,LDVWPLC                                             01595001
                                   1664 *                                                                    01596001
000DF0 5040 5E2C            00E74  1665 LDVWPLC ST    R4,LDRET                                           01597001
000DF4 4540 578A            007D2  1666         BAL   R4,OPDREC             ERAND RECOGNIZER             01598001
000DF8 9120 9000      00000        1667         TM    0(R9),X'20'           ADDR OR VALUE ?              01599001
000DFC 4710 5DF2            00E3A  1668         BO    LDVW1                 ADDR                         01600001
000E00 9140 9000      00000        1669         TM    0(R9),X'40'           VALUE IN REG ?               01601001
000E04 4710 5DE6            00E2E  1670         BO    LDVW3                 NO                           01602001
000E08 1B44                        1671         SR    R4,R4                                              01603001
000E0A 4340 9003            00003  1672         IC    R4,3(,R9)             GET REG NUMBER               01604001
000E0E 8840 0004            00004  1673         SRL   R4,4                                               01605001
000E12 8940 0001            00001  1674         SLL   R4,1                  DOUBLE IT                    01606001
000E16 9101 9001      00001        1675         TM    1(R9),X'01'           VALUE INTEGER ?              01607001
000E1A 4780 5DE2            00E2A  1676         BZ    LDVW4                 NO                           01608001
000E1E 8940 0001            00001  1677         SLL   R4,1                  YES, 4 TIMES REG NUMBER      01609001
000E22 5094 D5C0            005C0  1678         ST    R9,RUTI(R4)           INTRODUCE CORRECT R9 ADDR    01610001
000E26 47F0 5DE6            00E2E  1679         B     LDVW3                                              01611001
                                   1680 *                                                                    01612001
000E2A 5094 D5E4            005E4  1681 LDVW4   ST    R9,RUTR(R4)           INTRODUCE CORRECT R9 ADDR    01613001
000E2E 4540 5706            0074E  1682 LDVW3   BAL   R4,CLEARRG            CLEAR REGISTERS              01614001
000E32 4540 593C            00984  1683         BAL   R4,ROUTINE1           USE ROUTINE 1 TO LOAD VW-PLACE 01615001
000E36 47F0 5E26            00E6E  1684         B     LDVWR                                              01616001
                                   1685 *                                                                    01617001
000E3A 9500 9002      00002        1686 LDVW1   CLI   2(R9),X'00'           FUNCTION VALUE IN FSA        01618001
000E3E 4770 5E06            00E4E  1687         BNE   LDVW1A                                             01619001
000E42 5090 D5E0            005E0  1688         ST    R9,RUTI+32            INTRODUCE CORRECT R9 ADDR    01620001
000E46 9525 8000      00000        1689         CLI   0(R8),XFCOMMA         SOURCE OPERATOR COMMA        01621001
000E4A 4780 5DE6            00E2E  1690         BE    LDVW3                 YES                          01622001
000E4E 9140 9000      00000        1691 LDVW1A  TM    0(R9),X'40'           ADDR IN STACK ?              01623001
000E52 4710 5E1C            00E64  1692         BO    LDVW2                 YES                          01624001
000E56 9288 DA72      00A72        1693         MVI   VPLACE,X'88'          ADDR IN REG ADDR             01625001
000E5A D201 DA6A DA50 00A6A 00A50  1694         MVC   WPLACE(2),ZEROHW                                   01626001
000E60 47F0 5E26            00E6E  1695         B     LDVWR                                              01627001
                                   1696 *                                                                    01628001
000E64 92AA DA72      00A72        1697 LDVW2   MVI   VPLACE,X'AA'          ADDR                         01629001
000E68 D201 DA6A 9003 00A6A 00003  1698         MVC   WPLACE(2),3(R9)       IN STACK                     01630001
000E6E 5840 5E2C            00E74  1699 LDVWR   L     R4,LDRET                                           01631001
000E72 07F4                        1700         BR    R4                                                 01632001
                                   1701 *                                                                    01633001
000E74 00000000                    1702 LDRET   DC    F'0'                                               01634001
                                   1703 *                                                                    01635001
                                   1704 ********************************************************************** 01636001
                                   1705 *                                                                    01637001
                                   1706 *       SUBROUTINES FOR MOVING STACK POINTERS                        01638001
                                   1707 *                                                                    01639001
                                   1708 ********************************************************************** 01640001
                                   1709 *                                                                    01641001
                                   1710 *       ENTRY FOR MOVING OPERATOR STACK PTR                          01642001
                                   1711 *                                                                    01643001
000E78 41AA 0001            00001  1712 MOVEOPTK LA   R10,1(R10)                                         01644001
000E7C 47F0 5E3C            00E84  1713         B     MOVERET                                            01645001
                                   1714 *                                                                    01646001
                                   1715 *       ENTRY FOR MOVING OPDSTACK POINTER                            01647001
                                   1716 *                                                                    01648001
000E80 4B90 5170            001B8  1717 MOVEOPDK SH   R9,KH5                                             01649001
000E84 19A9                        1718 MOVERET CR    R10,R9                                             01650001
000E86 47B0 53E0            00428  1719         BNL   STACKOFL                                           01651001
000E8A 07F4                        1720         BR    R4                                                 01652001
                                   1721 *                                                                    01653001
                                   1722 ********************************************************************** 01654001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

                                   1723 *                                                                        01655001
                                   1724 *        TARITHM                                                         01656001
                                   1725 *                                                                        01657001
                                   1726 ********************************************************************** 01658001
                                   1727 *                                                                        01659001
                                   1728 * CALL   BAL   R4,TARITHM                                                01660001
                                   1729 *                                                                        01661001
                                   1730 *        RETURN TO RETURN IF OPERAND INTEGER OR REAL                     01662001
                                   1731 *        ELSE RETURN TO RETURN+4 AFTER ERROR MESSAGE 163 IS              01663001
                                   1732 *        GIVEN                                                           01664001
                                   1733 *        CHECK FOR ARRAY OR PROCEDURE IDENTIFIER                         01665001
                                   1734 *                                                                        01666001
                      00010        1735 APIMASK  EQU   X'10'                                                     01667001
                                   1736 *                                                                        01668001
                                   1737 *        TEST IF OPERAND IS ARITHMETIC                                   01669001
                                   1738 *                                                                        01670001
000E8C 9110 9000      00000        1739 TARITHM  TM    0(R9),APIMASK          API IN STACK                       01671001
000E90 0714                        1740          BOR   R4                     YES, RETURN NO ERROR               01672001
000E92 9103 9001      00001        1741          TM    1(R9),X'03'            OPERAND ARITHMETIC                 01673001
000E96 4740 5E64            00EAC  1742          BM    PROGARR                YES, CONTINUE CHECK                01674001
000E9A 5040 5570            005B8  1743          ST    R4,SAVTRREI            SAVE RETURN                        01675001
000E9E 4540 5310            00358  1744          BAL   R4,SERR2                                                  01676001
000EA2 00A3                        1745          DC    H'163'                 ERROR 163                          01677001
                                   1746 *                                                                        01678001
000EA4 5840 5570            005B8  1747          L     R4,SAVTRREI                                               01679001
000EA8 47F4 0004            00004  1748          B     4(R4)                  RETURN ERROR MESSAGE 163 GIVEN     01680001
                                   1749 *                                                                        01681001
000EAC 4114 0004            00004  1750 PROGARR  LA    R1,4(R4)                                                  01682001
000EB0 5010 5570            005B8  1751          ST    R1,SAVTRREI            ERROR RETURN FROM ARRTEST          01683001
000EB4 47F0 5E9E            00EE6  1752          B     ARRTESTA               CHECK FOR PROCEDURE OR ARRAY       01684001
                                   1753 *                                                                        01685001
                                   1754 ********************************************************************** 01686001
                                   1755 *                                                                        01687001
                                   1756 *        LATRES                                                          01688001
                                   1757 *                                                                        01689001
                                   1758 ********************************************************************** 01690001
                                   1759 *                                                                        01691001
                                   1760 * CALL   BAL   R4,LATRES                                                 01692001
                                   1761 *                                                                        01693001
                                   1762 *        RESERVE ONE ENTRY IN LABEL ADDR TABLE (LAT)                     01694001
                                   1763 *        CHECK IF OVERFLOW                                               01695001
                                   1764 *                                                                        01696001
000EB8 4810 D0A2            000A2  1765 LATRES   LH    R1,LN                  GET CURRENT LN                     01697001
000EBC 4110 1004            00004  1766          LA    R1,4(,R1)              ADD ONE ENTRY                      01698001
000EC0 4010 D0A2            000A2  1767          STH   R1,LN                  STORE NEW LN                       01699001
                                   1768 *                                                                        01700001
                                   1769 *        CHECK IF LAT OVERFLOW                                           01701001
                                   1770 *                                                                        01702001
000EC4 91F0 D0A2      000A2        1771 LATOVFLO TM    LN,X'F0'               LAT FULL ?                         01703001
000EC8 0784                        1772          BZR   R4                     NO                                 01704001
000ECA 5040 5E2C            00E74  1773          ST    R4,LDRET               SAVE RETURN ADDR                   01705001
000ECE 4540 5380            003C8  1774          BAL   R4,SERR1               GENERATE ERROR PATTERN             01706001
000ED2 00D8                        1775          DC    H'216'                                                    01707001
                                   1776 *                                                                        01708001
000ED4 4110 006C            0006C  1777          LA    R1,LATBEG              RESET POINTER                      01709001
000ED8 4010 D0A2            000A2  1778          STH   R1,LN                  TO FIRST ENTRY                     01710001
000EDC 5840 5E2C            00E74  1779          L     R4,LDRET                                                  01711001
000EE0 07F4                        1780          BR    R4                                                        01712001
                                   1781 *                                                                        01713001
                                   1782 ********************************************************************** 01714001
                                   1783 *                                                                        01715001
                                   1784 *        ARRAY AND PROCEDURE TEST                                        01716001
                                   1785 *                                                                        01717001
                                   1786 ********************************************************************** 01718001
                                   1787 *                                                                        01719001
                                   1788 * CALL   BAL   R4,ARRTEST1                                               01720001
                                   1789 *                                                                        01721001
000EE2 5040 5570            005B8  1790 ARRTEST1 ST    R4,SAVTRREI            SAVE RETURN                        01722001
                                   1791 *                                                                        01723001
                                   1792 *        ENTRY POINT FROM TARITHM                                        01724001
                                   1793 *                                                                        01725001
000EE6 9110 9000      00000        1794 ARRTESTA TM    0(R9),APIMASK          OPERAND API ?                      01726001
000EEA 0714                        1795          BOR   R4                     YES, RETURN                        01727001
000EEC 91C0 9001      00001        1796          TM    1(R9),X'C0'            PROCEDURE ?                        01728001
000EF0 47B0 5EB4            00EFC  1797          BNM   ARRTESTT                                                  01729001
000EF4 9140 9001      00001        1798          TM    1(R9),X'40'            STANDARD PROCEDURE                 01730001
000EF8 4780 5EDA            00F22  1799          BZ    PROCTES1               YES, ERROR                         01731001
000EFC 91C0 9000      00000        1800 ARRTESTT TM    0(R9),X'C0'            IDENTIFIER FROM ITAB ?             01732001
000F00 07E4                        1801          BNOR  R4                     NO, RETURN                         01733001
000F02 9104 9001      00001        1802          TM    1(R9),X'04'                                               01734001
000F06 4780 5ECE            00F16  1803          BZ    PROCTEST               NO, ARRAY CONTINUE TEST            01735001
000F0A 4540 5318            00360  1804          BAL   R4,SERR3                                                  01736001
000F0E 00C4                        1805          DC    H'196'                                                    01737001
                                   1806 *                                                                        01738001
000F10 5840 5570            005B8  1807 ARRTEST3 L     R4,SAVTRREI            RESTORE RETURN                     01739001
000F14 07F4                        1808          BR    R4                                                        01740001
                                   1809 *                                                                        01741001
000F16 91C0 9001      00001        1810 PROCTEST TM    1(R9),X'C0'            PROCEDURE ?                        01742001
000F1A 0784                        1811          BZR   R4                     NO, RETURN                         01743001
000F1C 91F0 9003      00003        1812          TM    3(R9),X'F0'            PARAMETERLESS ?                    01744001
000F20 0784                        1813          BZR   R4                     YES, RETURN                        01745001
000F22 4540 5380            003C8  1814 PROCTES1 BAL   R4,SERR1               ERROR 187                          01746001
000F26 00BB                        1815          DC    H'187'                                                    01747001
                                   1816 *                                                                        01748001
000F28 47F0 5EC8            00F10  1817          B     ARRTEST3                                                  01749001
                                   1818 *                                                                        01750001
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  Active USINGs: IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000F2C 5040 5F04            00F4C  1819 ARRTEST2 ST    R4,RETARR2                                                  01751001
000F30 4190 9005            00005  1820          LA    R9,5(,R9)                                                   01752001
000F34 06A0                        1821          BCTR  R10,0                                                       01753001
000F36 4540 5E9A            00EE2  1822          BAL   R4,ARRTEST1                                                 01754001
000F3A 41A0 A001            00001  1823          LA    R10,1(,R10)                                                 01755001
000F3E 4B90 5170            001B8  1824          SH    R9,KH5                                                      01756001
000F42 5840 5F04            00F4C  1825          L     R4,RETARR2                                                  01757001
000F46 47F0 5E9A            00EE2  1826          B     ARRTEST1                                                    01758001
                                   1827 *                                                                          01759001
000F4A 0000
000F4C 00000000                    1828 RETARR2  DC    F'0'                                                        01760001
                                   1829 *                                                                          01761001
                                   1830 ********************************************************************** 01762001
                                   1831 *                                                                          01763001
                                   1832 *        OPERAND TEST                                                      01764001
                                   1833 *                                                                          01765001
                                   1834 ********************************************************************** 01766001
                                   1835 *                                                                          01767001
                                   1836 * CALL   BAL   R4,OPDTEST                                                  01768001
                                   1837 *                                                                          01769001
                                   1838 *        GIVE ERROR MESSAGE 162 IF OPERAND IS MISSING                      01770001
                                   1839 *        STACK ALL PURPOSE IDENTIFIER                                      01771001
                                   1840 *        RETURN VIA R4 IF NO ERROR RETURN VIA R3                           01772001
                                   1841 *                                                                          01773001
000F50 9101 D080      00080        1842 OPDTEST  TM    COMPFLGS,OPERAND        OPERAND PRESENT ?                   01774001
000F54 0713                        1843          BOR   R3                      YES, RETURN                         01775001
000F56 5040 D624            00624  1844          ST    R4,STRETURN                                                 01776001
000F5A 4540 5304            0034C  1845          BAL   R4,SERR4                ERROR 162                           01777001
000F5E 00A2                        1846          DC    H'162'                                                      01778001
                                   1847 *                                                                          01779001
000F60 5840 D624            00624  1848          L     R4,STRETURN                                                 01780001
000F64 9601 D080      00080        1849          OI    COMPFLGS,OPERAND        OPERAND SWITCH ON                   01781001
000F68 47F0 5D02            00D4A  1850          B     STACKAPI                STACK API RETURN DIRECT             01782001
                                   1851 *                                                                          01783001
000F6C 5040 D578            00578  1852 ERR166   ST    R4,RETADR               STORE RETURN ADDR                   01784001
000F70 9101 D080      00080        1853          TM    COMPFLGS,OPERAND        OPDT ?                              01785001
000F74 4780 5F38            00F80  1854          BZ    BYB2                    NO, BRANCH                          01786001
000F78 4190 9005            00005  1855          LA    R9,5(,R9)               CLOPD                               01787001
000F7C 94FE D080      00080        1856          NI    COMPFLGS,255-OPERAND    OPDFL=FALSE                         01788001
000F80 4540 5380            003C8  1857 BYB2     BAL   R4,SERR1                ERROR 166                           01789001
000F84 00A6                        1858          DC    H'166'                                                      01790001
                                   1859 *                                                                          01791001
000F86 5840 D578            00578  1860          L     R4,RETADR               LOAD RETURN ADDR                    01792001
000F8A 07F4                        1861          BR    R4                      RETURN                              01793001
                                   1862 *                                                                          01794001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     1864 *                                                                     01796001
                                     1865 *        DECISION MATRICIES                                           01797001
                                     1866 *                                                                     01798001
                                     1867 *        START OF DECISION AREA                                       01799001
                                     1868 *                                                                     01800001
                                     1869 *********************************************************************** 01801001
                                     1870 *                                                                     01802001
                                     1871 *        PROGRAM CONTEXT COLUMN VECTOR                                01803001
                                     1872 *                                                                     01804001
                                     1873 *********************************************************************** 01805001
                                     1874 *                                                                     01806001
000F8C 0A0A0A0A0A0A0912              1875 DECAREA  DC    X'0A0A0A0A0A0A09120703030B000002020A0A0A0A0A080404'   01807001
000FA5 121212120512060A              1876          DC    X'121212120512060A0A0A0A0A121201120C0D0E0F1110000000'   01808001
                                     1877 *                                                                     01809001
                                     1878 *********************************************************************** 01810001
                                     1879 *                                                                     01811001
                                     1880 *        PROGRAM CONTEXT ROW VECTOR                                   01812001
                                     1881 *                                                                     01813001
                                     1882 *********************************************************************** 01814001
                                     1883 *                                                                     01815001
000FBE ABABABABABABABAB              1884          DC    X'ABABABABABABABABABAB853926131313ABABABABABAB72ABAB'   01816001
000FD7 ABABAB98ABABABAB              1885          DC    X'ABABAB98ABABABABABABABABAB00AB4C5FABABABABABAB000030'   01817001
                                     1886 *                                                                     01818001
                                     1887 *********************************************************************** 01819001
                                     1888 *                                                                     01820001
                                     1889 *        PROGRAM CONTEXT MATRIX                                       01821001
                                     1890 *                                                                     01822001
                                     1891 *********************************************************************** 01823001
                                     1892 *                                                                     01824001
000FF0 0001045454545454              1893          DC    X'000104545454545454545454545454545454540354'           01825001
001003 0001040407074B07              1894          DC    X'0001040407074B0707074B191810545453544B'               01826001
001016 00011D1D06084B29              1895          DC    X'00011D1D06084B290C404B191C54541054544B'               01827001
001029 00011A1A06084B29              1896          DC    X'00011A1A06084B290C404B171C17171754544B'               01828001
00103C 00011A1A064B1129              1897          DC    X'00011A1A064B11290C404B121C12121254544B'               01829001
00104F 00011A1A06084B29              1898          DC    X'00011A1A06084B290C404B121C12121254544B'               01830001
001062 1B1E1A1A1B131429              1899          DC    X'1B1E1A1A1B131429151616141C14141454544B'               01831001
001075 5454545454545454              1900          DC    X'545454545454545455545454541C545454545454'             01832001
001088 00011D1D06084B29              1901          DC    X'00011D1D06084B290C404B1A1C54515454544B'               01833001
00109B 1F1E1F1F1F1F1F1F              1902          DC    X'1F1E1F1F1F1F1F1F1F1F1F1F1F1C1F1F1F545416'             01834001
                                     1903 *                                                                     01835001
                                     1904 *********************************************************************** 01836001
                                     1905 *                                                                     01837001
                                     1906 *        STATEMENT CONTEXT COLUMN VECTOR                              01838001
                                     1907 *                                                                     01839001
                                     1908 *********************************************************************** 01840001
                                     1909 *                                                                     01841001
0010AE 090909090909010D              1910 ADRSTC   DC    X'090909090909010D030F0F0C0F0F0F0F0A0A0A0A0A0A060F0F'   01842001
0010C7 0708070B000F0C0A              1911          DC    X'0708070B000F0C0A0A0A0A0A05020F040E0C0C0C0F0F000000'   01843001
                                     1912 *                                                                     01844001
                                     1913 *********************************************************************** 01845001
                                     1914 *                                                                     01846001
                                     1915 *        STATEMENT CONTEXT ROW VECTOR                                 01847001
                                     1916 *                                                                     01848001
                                     1917 *********************************************************************** 01849001
                                     1918 *                                                                     01850001
0010E0 D0D0D0D0D0D0D0B0              1919          DC    X'D0D0D0D0D0D0D0B03040D0D0D0D0D0D0D0D0D0D0D0D0D0D0D000060'   01851001
0010F9 8090A0D0D0D0D0D0              1920          DC    X'8090A0D0D0D0D0D0D0D0D0D0D0D0D0D0D02050D0C07010000033'   01852001
                                     1921 *                                                                     01853001
                                     1922 *********************************************************************** 01854001
                                     1923 *                                                                     01855001
                                     1924 *        STATEMENT CONTEXT MATRIX                                     01856001
                                     1925 *                                                                     01857001
                                     1926 *********************************************************************** 01858001
                                     1927 *                                                                     01859001
001112 22384B294B4B4B4B              1928          DC    X'22384B294B4B4B4B4B4B4B3E4B1C1B'                       01860001
001122 22384B294B3B544B              1929          DC    X'22384B294B3B544B4B4B4B1B543B1B'                       01861001
001132 224039294B394B4B              1930          DC    X'224039294B394B4B4B21214B1B4B1C1B'                     01862001
001142 22404B2926264B4B              1931          DC    X'22404B2926264B4B4B214B4B1B4B1C1B'                     01863001
001152 5454543454345454              1932          DC    X'5454543454345454545454541B543654'                     01864001
001162 22403D294B3D4B4B              1933          DC    X'22403D294B3D4B4B4B21214B1B4B1C1B'                     01865001
001172 4B4B4B294B4B284B              1934          DC    X'4B4B4B294B4B284B4B4B4B1B1B4B1C1B'                     01866001
001182 22404B294B2B4B2B              1935          DC    X'22404B294B2B4B2B4B214B2B1B4B1C1B'                     01867001
001192 22404B294B4B4B4B              1936          DC    X'22404B294B4B4B4B2D214B1B1B4B1C1B'                     01868001
0011A2 22404B294B2F4B4B              1937          DC    X'22404B294B2F4B4B4B214B2F1B4B1C1B'                     01869001
0011B2 22404B294B314B4B              1938          DC    X'22404B294B314B4B4B2121311B4B1C1B'                     01870001
0011C2 22404B2933334B4B              1939          DC    X'22404B2933334B4B4B214B4B1B4B1C1B'                     01871001
0011D2 22404B294B4B544B              1940          DC    X'22404B294B4B544B4B214B4B1B241C1B'                     01872001
0011E2 224B4B4B4B4B4B4B              1941          DC    X'224B4B4B4B4B4B4B4B4B4B474B1C47'                       01873001
                                     1942 *                                                                     01874001
                                     1943 *********************************************************************** 01875001
                                     1944 *                                                                     01876001
                                     1945 *        EXPRESSION CONTEXT COLUMN VECTOR                             01877001
                                     1946 *                                                                     01878001
                                     1947 *********************************************************************** 01879001
                                     1948 *                                                                     01880001
0011F2 0B0B0C0C0C0D050F              1949 ADREXC   DC    X'0B0B0C0C0C0D050F070F0F0F0F0F0F0F0E0E0E0E0E0E0F0F0F'   01881001
00120B 0F0F0F0F08090A00              1950          DC    X'0F0F0F0F08090A00020304010F060F0F0F0F0F0F0F0F000000'   01882001
                                     1951 *                                                                     01883001
                                     1952 *********************************************************************** 01884001
                                     1953 *                                                                     01885001
                                     1954 *        EXPRESSION CONTEXT ROW VECTOR                                01886001
                                     1955 *                                                                     01887001
                                     1956 *********************************************************************** 01888001
                                     1957 *                                                                     01889001
001224 A0A0B0B0B0C050E0              1958          DC    X'A0A0B0B0B0C050E0E0E0E0E0E0E0E0E0D0D0D0D0D0D0D0E0E0E0'   01890001
00123D E0E0E0E060708000              1959          DC    X'E0E0E0E06070800020304010E060E0E0E0E090E0E0E000003F'   01891001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                   1960 *                                                                   01892001
                                   1961 *********************************************************************** 01893001
                                   1962 *                                                                   01894001
                                   1963 *        EXPRESSION CONTEXT MATRIX                                  01895001
                                   1964 *                                                                   01896001
                                   1965 *********************************************************************** 01897001
                                   1966 *                                                                   01898001
001256 4B4D4D4D4D404D29            1967          DC    X'4B4D4D4D4D404D29494D4D424343434D'                  01899001
001266 414C434343404C29            1968          DC    X'414C434343404C29494C4C424343434C'                  01900001
001276 414C4C4343404C29            1969          DC    X'414C4C4343404C29494C4C424343434C'                  01901001
001286 414C4C4C43404C29            1970          DC    X'414C4C4C43404C29494C4C424343434C'                  01902001
001296 414C4C4C4C404C29            1971          DC    X'414C4C4C4C404C29494C4C424343434C'                  01903001
0012A6 4143434343404429            1972          DC    X'4143434343404429501B1B424343431B'                  01904001
0012B6 4143434343404B29            1973          DC    X'4143434343404B29414E56424343431B'                  01905001
0012C6 4143434343404B29            1974          DC    X'4143434343404B29494B57424343431B'                  01906001
0012D6 4143434343404F29            1975          DC    X'4143434343404F29414F48424343434F'                  01907001
0012E6 4B3F3F3F3F403F29            1976          DC    X'4B3F3F3F3F403F29493F3F3F3F433F3F'                  01908001
0012F6 4B45454545404529            1977          DC    X'4B454545454045294945454543434545'                  01909001
001306 4B45454545404529            1978          DC    X'4B454545454045294945454545434545'                  01910001
001316 4B45454545404529            1979          DC    X'4B454545454045294945454545454545'                  01911001
001326 4B45454545404529            1980          DC    X'4B4545454540452949454542434344A45'                 01912001
001336 4143434343404629            1981          DC    X'4143434343404629464B464243434346'                  01913001
                                   1982 *                                                                   01914001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                     1984 *                                                               01916001
                                     1985 *        THIS MODULE HAD ITS OWN INLINE VERSION OF THE WORKAREA    01917001
                                     1986 *        WHICH HAD ITS OWN VARIABLES APPENDED ONTO THE END LIKE    01918001
                                     1987 *        IEX40. THE INLINE VERSION HAS BEEN DELETED AND HAVE       01919001
                                     1988 *        INSTEAD INSERTED A COPY WORKAREA. THIS WILL NEED TO HAVE  01920001
                                     1989 *        ADDITIONAL VARIABLES APPENDED AS THEY ARE DISCOVERED BY   01921001
                                     1990 *        DISASSEMBLY AND PICKED UP FROM IEX40                      01922001
                                     1991 *                                                               01923001
000000                00000 00DA8    1992 WORKAREA DSECT                                                  01924001
                                     1993 *                                                               01925001
                                     1994          COPY  WORKAREA                                          01926001
                                     1995=*                                                               00001001
                                     1996=*        WORKAREA - MAPPING CSECT IEX00001                         00002001
                                     1997=*                                                               00003001
                                     1998=*        ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT  00004001
                                     1999=*                                                               00005001
000000 0000000000000000              2000=SAVEAREA DC    18F'0'                                          00006001
                                     2001=*                                                               00007001
                                     2002=*        DCB ADDRS                                              00008001
                                     2003=*                                                               00009001
000048                               2004=DCBTABLE DC    0F'0'                                           00010001
000048 00000000                      2005=ALINDCB  DC    A(0)                                            00011001
00004C 00000000                      2006=         DC    A(0)                                            00012001
000050 00000000                      2007=         DC    A(0)                                            00013001
000054 00000000                      2008=         DC    A(0)                                            00014001
000058 00000000                      2009=ASYSDCB  DC    A(0)                                            00015001
00005C 00000000                      2010=APRTDCB  DC    A(0)                                            00016001
000060 00000000                      2011=APCHDCB  DC    A(0)                                            00017001
000064 00000000                      2012=AUT1DCB  DC    A(0)                                            00018001
000068 00000000                      2013=AUT2DCB  DC    A(0)                                            00019001
00006C 00000000                      2014=AUT3DCB  DC    A(0)                                            00020001
                                     2015=*                                                               00021001
                                     2016=*        END OF DATA EXIT ADDRS                                 00022001
                                     2017=*                                                               00023001
000070 00000000                      2018=EODUT1   DC    A(0)                  SYSUT1                     00024001
000074 00000000                      2019=EODUT2   DC    A(0)                  SYSUT2                     00025001
000078 00000000                      2020=EODUT3   DC    A(0)                  SYSUT3                     00026001
00007C 00000000                      2021=EODIN    DC    A(0)                  SYSIN                      00027001
                                     2022=*                                                               00028001
                                     2023=*        OPTION SWITCHES IN COMPFLGS                            00029001
                                     2024=*                                                               00030001
                                     2025=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -          00031001
                                     2026=*                                                               00032001
                                     2027=*        PURPOSE                    POSITION                    00033001
                                     2028=*                                   BYTE 1    BYTE 2    BYTE 3  00034001
                                     2029=*                                   01234567  01234567  01234567  00035001
                                     2030=*                                                               00036001
                                     2031=*        COMPMODE (SYNTAX CHECK)    X                           00037001
                                     2032=*        SUBSCRIPT OPTIMIZATION      X                          00038001
                                     2033=*        WARNING ERROR                X                         00039001
                                     2034=*        SERIOUS ERROR                 X                        00040001
                                     2035=*        TERMINATING ERROR              X                       00041001
                                     2036=*        PROCEDURE/PROGRAM               X                      00042001
                                     2037=*        LONG/SHORT PRECISION             X                     00043001
                                     2038=*        OPERAND                           X                    00044001
                                     2039=*                                                               00045001
                                     2040=*        NOSOURCE/SOURCE                      X                 00046001
                                     2041=*        NOLOAD/LOAD                           X                00047001
                                     2042=*        NODECK/DECK                            X               00048001
                                     2043=*        ISO/EBCDIC                              X              00049001
                                     2044=*        PROGRAM INTERRUPT                        X             00050001
                                     2045=*        TERMINATING PHASE ENTERED                 X            00051001
                                     2046=*        NO BUFFERS ASSIGNED                        X           00052001
                                     2047=*        NO COMPILATION POSSIBLE                     X          00053001
                                     2048=*                                                               00054001
                                     2049=*        SYSPRINT DOWN                                  X       00055001
                                     2050=*        WHOLE SOURCE PROG IN CORE                       X      00056001
                                     2051=*        NO OPTAB                                         X     00057001
                                     2052=*        SYSPRINT NOT OPENED                               X    00058001
                                     2053=*        ERROR UNRELATED TO SEMICOLON NR                    X   00059001
                                     2054=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)      X  00060001
                                     2055=*        60 CHARACTER SET                                     X 00061001
                                     2056=*        (RESERVED)                                            X 00062001
                                     2057=*                                                               00063001
000080 00220000                      2058=COMPFLGS DC    X'00220000'           PARAMETERS AND SWITCHES    00064001
                                     2059=*                                                               00065001
                                     2060=*        OPTION SWITCHES IN COMPFLGS                            00066001
                                     2061=*                                                               00067001
                      00080          2062=COMPMODE EQU   X'80'                 SYNTAX CHECK MODE          00068001
                      00040          2063=SUBSCOPT EQU   X'40'                 SUBSCRIPT OPTIMIZATION     00069001
                      000FB          2064=PGR      EQU   X'FB'                                            00070001
                      00004          2065=PROC     EQU   X'04'                 PRECOMPILED PROCEDURE      00071001
                                     2066=*                                                               00072001
                      000FD          2067=SHRT     EQU   X'FD'                                            00073001
                      00002          2068=LNG      EQU   X'02'                                            00074001
                      00001          2069=OPERAND  EQU   X'01'                                            00075001
                                     2070=*                                                               00076001
                                     2071=*        ERROR SEVERITY INDICATORS IN COMPFLGS                  00077001
                                     2072=*                                                               00078001
                      00020          2073=WERR     EQU   X'20'                 WARNING ERROR              00079001
                      00010          2074=SERR     EQU   X'10'                 SERIOUS ERROR              00080001
                      00008          2075=TERR     EQU   X'08'                 TERMINATING ERROR          00081001
                                     2076=*                                                               00082001
                                     2077=*        OPTION SWITCHES IN COMPFLGS+1                          00083001
                                     2078=*                                                               00084001
                      0007F          2079=SRCE     EQU   X'7F'                                            00085001
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D-Loc  Object Code      Addr1 Addr2  Stmt    Source Statement                                  X390 3.1.04  2012/08/17 13.13

                        00080        2080=NSRCE    EQU   X'80'                                                         00086001
                                     2081=*                                                                            00087001
                        000BF        2082=LOAD     EQU   X'BF'                                                         00088001
                        00040        2083=NLOAD    EQU   X'40'                                                         00089001
                                     2084=*                                                                            00090001
                        000DF        2085=DECK     EQU   X'DF'                                                         00091001
                        00020        2086=NDECK    EQU   X'20'                                                         00092001
                                     2087=*                                                                            00093001
                        000EF        2088=EBCDIC   EQU   X'EF'                                                         00094001
                        00010        2089=ISO      EQU   X'10'                                                         00095001
                                     2090=*                                                                            00096001
                                     2091=*        TERMINATION SWITCHES IN COMPFLGS+1                                  00097001
                                     2092=*                                                                            00098001
                        00008        2093=ERR      EQU   X'08'                PROGRAM INTERRUPT HAS                    00099001
                                     2094=*                                   OCCURED IN COMPILER                      00100001
                        00004        2095=TERM     EQU   X'04'                LAST PHASE HAS BEEN ENTERED              00101001
                        00002        2096=NOBUF    EQU   X'02'                ERROR POOL IS IN WORKAREA                00102001
                                     2097=*                                   NO SCE PROG BUFF 1                       00103001
                        00001        2098=NOGO     EQU   X'01'                COMPILATION NOT POSSIBLE                 00104001
                                     2099=*                                   DO NOT START SCAN 1                      00105001
                        00003        2100=NOBUNOGO EQU   X'03'                NOBUF AND NOGO                           00106001
                                     2101=*                                                                            00107001
                                     2102=*        SWITCHES IN COMPFLGS+2                                              00108001
                                     2103=*                                                                            00109001
                        00080        2104=PRT      EQU   X'80'                SYSPRINT NOT AVAILABLE                   00110001
                        00040        2105=SPIC     EQU   X'40'                SOURCE PROGRAM IN STORAGE                00111001
                        00020        2106=NOPT     EQU   X'20'                NO SUBSCRIPT OPTIMIZATION                00112001
                        00010        2107=PRTNO    EQU   X'10'                SYSPRINT NOT OPENED                      00113001
                        00008        2108=NOSC     EQU   X'08'                SEMICOLON COUNTER NOT VALID              00114001
                                     2109=*                                                                            00115001
                        00004        2110=NOTEST   EQU   X'04'                                                         00116001
                        000FB        2111=TEST     EQU   X'FB'                EMBED SC COUNT IN CODE (DEFAULT)         00117001
                                     2112=*                                                                            00118001
                        00002        2113=SET60    EQU   X'02'                60 CHARACTER SET IS TO BE USED           00119001
                                     2114=*                                                                            00120001
                                     2115=*        MISCELLANEOUS CONTROL INFORMATION                                   00121001
                                     2116=*                                                                            00122001
000084 0000B000                      2117=SIZE     DC    F'45056'         AVAILABLE MAIN STORAGE - NOT USED            00123001
000088 00000000                      2118=PICAADD  DC    A(0)             ADDR OF PICA OF THE INVOKER                  00124001
00008C 00000000                      2119=HDING    DC    F'0'             ADDR OF HEADING INFO OF THE INVOKER          00125001
000090 00000000                      2120=ERET     DC    F'0'             RETURN ADDR FOR PROGRAM                      00126001
                                     2121=*                               AND I/O ERRORS                               00127001
000094 0000000C                      2122=PAGECNT  DC    PL4'0'           PAGE COUNT                                   00128001
000098 0000                          2123=LINCNT   DC    H'0'             COUNTER OF LINES PER PAGE                    00129001
00009A 0038                          2124=MAXLINES DC    H'56'            MAX NUMBER OF PRINT LINES PER PAGE           00130001
00009C 0000                          2125=SEMCNT   DC    H'0'             SEMICOLON COUNTER                            00131001
00009E 0032                          2126=PBN      DC    H'50'            HIGHEST PROGRAM BLOCK NUMBER                 00132001
0000A0 0000                          2127=KBN      DC    H'0'             HIGHEST CONSTANT POOL NUMBER                 00133001
                        0001C        2128=LATNR    EQU   28               NR OF LIBRARY STAND FUNCTIONS                00134001
                        0006C        2129=LATBEG   EQU   4*(LATNR-1)                                                   00135001
0000A2 006C                          2130=LN       DC    AL2(LATBEG)      LAST USED DISPLACEMENT IN LAT                00136001
0000A4 00000000                      2131=PRPT     DC    F'0'             PROGRAM POINTER                              00137001
0000A8 00000000                      2132=SAVOUTA  DC    F'0'                                                          00138001
0000AC                               2133=OUTAREA2 DS    F                SYSPUNCH SAVE AREA                           00139001
0000B0 40404040                      2134=PIDENT   DC    CL4' '           PROGRAM IDENTIFICATION                       00140001
0000B4 0000000C                      2135=CARDCNT  DC    PL4'0'           OBJECT PROGRAM DECK SEQUENCE NUMBER          00141001
0000B8 00000000                      2136=PRTRTADD DC    A(0)             ADDR OF PRINT ROUTINE                        00142001
                                     2137=*                                                                            00143001
                                     2138=*        ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE           00144001
                                     2139=*                                                                            00145001
0000BC 00000278                      2140=ERRPOOL  DC    A(PRELPOOL)      FIRST BYTE OF PRELIMINARY ERROR POOL         00146001
0000C0 00000278                      2141=NEXTERR  DC    A(PRELPOOL)      NEXT FREE PLACE IN ERROR POOL                00147001
0000C4                               2142=ENDPOOL  DS    F                LAST BYTE OF ERROR POOL-23                   00148001
0000C8                               2143=SRCE1ADD DS    F                SOURCE PROGRAM BUFFER 1                      00149001
0000CC                               2144=SRCE1END DS    F                ADDR OF LAST BYTE+1                          00150001
0000D0                               2145=SULTSTRT DS    F                ID OF LAST ITAB RECORD                       00151001
                                     2146=*                                                                            00152001
                                     2147=*                                                                            00153001
                                     2148=*        TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                         00154001
                                     2149=*                                                                            00155001
0000D4                               2150=INBLKS   DS    H                MAX BLKSIZE FOR SYSIN    - NOT USED          00156001
0000D6                               2151=PRTBLKS  DS    H                MAX BLKSIZE SYSPRINT     - NOT USED          00157001
0000D8                               2152=LINBLKS  DS    H                MAX BLKSIZE FOR SYSLIN   - NOT USED          00158001
0000DA                               2153=PCHBLKS  DS    H                MAX BLKSIZE FOR SYSPUNCH - NOT USED          00159001
0000DC                               2154=POOLS    DS    F                SIZE OF ERROR POOL                           00160001
0000E0                               2155=SRCE1S   DS    F                SIZE OF SOURCE PROG BUFFERS 1 AND 2          00161001
                        000E0        2156=SRCE3S   EQU   SRCE1S           SIZE OF SOURCE PROG BUFFERS 3 AND 4          00162001
0000E4                               2157=ITAB10S  DS    F                SIZE OF ITAB FOR PHASE 10                    00163001
0000E8                               2158=ITAB20S  DS    F                SIZE OF ITAB FOR PHASE 20                    00164001
0000EC                               2159=ITAB30S  DS    F                SIZE OF ITAB FOR PHASE 30                    00165001
0000F0                               2160=CRIDTABS DS    F                SIZE OF CRIDTAB FOR PHASE 30                 00166001
0000F4                               2161=SUTAB30S DS    F                SIZE OF SUTAB BUFFER OF PHASE 30             00167001
0000F8                               2162=LVTAB30S DS    F                SIZE OF LVTAB BUFFER FOR PHASE 30            00168001
0000FC                               2163=OPTABS   DS    F                SIZE OF OPTAB BUFFERS 1 AND 2                00169001
000100                               2164=SUTAB40S DS    F                SIZE OF SUTAB IN PHASE 40                    00170001
000104                               2165=LVTAB40S DS    F                SIZE OF LVTAB IN PHASE 40                    00171001
000108                               2166=OOSTACKS DS    F                SIZE OF OPERATOR/OPERAND STACK               00172001
                                     2167=*                                                                            00173001
                                     2168=*        AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF                00174001
                                     2169=*        EACH NEW PAGE                                                       00175001
                                     2170=*                                                                            00176001
                        0010C        2171=PAGEHEAD EQU   *                                                             00177001
00010C 4040404040404040              2172=PAGEHD1  DC    CL121' '              FIRST HEADLINE                          00178001
000185                  00185 0010C  2173=         ORG   PAGEHD1                                                       00179001
00010C F1                            2174=PAGEHD1C DC    C'1'                  ASA CNTL                                00180001
00010D 4040404040404040              2175=         DC    CL10' '               SPACER                                  00181001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

000117 4040404040404040              2176=PAGEHD1D DC     CL100' '                 PAGE TEXT HEADING          00182001
00017B                  0017B 0017D  2177=         ORG    PAGEHD1+113                                         00183001
00017D D7C1C7C5                      2178=PAGEHD1P DC     CL4'PAGE'                PAGE                       00184001
000181 40404040                      2179=PAGENUMB DC     CL4' '                   PAGE COUNTER               00185001
000185                  00185 00185  2180=         ORG                                                        00186001
                                     2181=*                                                                   00187001
000185 4040404040404040              2182=PAGEHD2  DC     CL121' '                 SECOND HEADLINE            00188001
0001FE                  001FE 00185  2183=         ORG    PAGEHD2                                             00189001
000185 40                            2184=PAGEHD2C DC     C' '                     ASA CNTL                   00190001
000186 4040404040404040              2185=         DC     CL10' '                  SPACER                     00191001
000190 4040404040404040              2186=PAGEHD2D DC     CL100' '                 PAGE TEXT HEADING          00192001
0001F4                  001F4 001FE  2187=         ORG                                                        00193001
                                     2188=*                                                                   00194001
0001FE 4040404040404040              2189=PAGEHD3  DC     CL121' '                 THIRD HEADLINE             00195001
000277                  00277 001FE  2190=         ORG    PAGEHD3                                             00196001
0001FE 40                            2191=PAGEHD3C DC     C' '                     ASA CNTL                   00197001
0001FF 4040404040404040              2192=         DC     CL10' '                  SPACER                     00198001
000209 4040404040404040              2193=PAGEHD3D DC     CL100' '                 PAGE TEXT HEADING          00199001
00026D                  0026D 00277  2194=         ORG                                                        00200001
                                     2195=*                                                                   00201001
                                     2196=*                                                                   00202001
                                     2197=*        END OF STANDARD COMMON AREA                                00203001
                                     2198=*                                                                   00204001
                        00277        2199=STANDX   EQU    *                                                   00205001
                                     2200=*                                                                   00206001
                                     2201=*        THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL         00207001
                                     2202=*        PHASES AND PARTLY OVERLAY EACH OTHER                       00208001
                                     2203=*                                                                   00209001
                                     2204=*                           NAME OR PURPOSE          NEEDED BY PHASES 00210001
                                     2205=*                                                                   00211001
000277 00
000278                               2206=         DC     0F'0'                                               00212001
000278 4040404040404040              2207=PRELPOOL DC     236C' ',20C'X' PRELIMINARY ERROR POOL     IEX10     00213001
000378                  00378 00416  2208=         ORG    PRELPOOL+414                                        00214001
                                     2209=*                           DCB FOR SYSIN                 11        00215001
                                     2210=SYSIN    DCB    DDNAME=SYSIN,                                      X00216001
                                         =                DSORG=PS,                                          X00217001
                                         =                MACRF=(GM),                                        X00218001
                                         =                RECFM=FB,                                          X00219001
                                         =                LRECL=80,                                          X00220001
                                         =                BFTEK=S                                             00221001


                                     2212+*                     DATA CONTROL BLOCK                          01-DCB
                                     2213+*                                                                 01-DCB
000416 0000
000418                               2214+SYSIN    DC     0F'0'                   ORIGIN ON WORD BOUNDARY   01-DCB

                                     2216+*                     DIRECT ACCESS DEVICE INTERFACE              01-DCB

000418 0000000000000000              2218+         DC     BL16'0'                  FDAD,DVTBL               01-DCB
000428 00000000                      2219+         DC     A(0)                     KEYLE,DEVT,TRBAL         01-DCB

                                     2221+*                     COMMON ACCESS METHOD INTERFACE              01-DCB

00042C 00                            2223+         DC     AL1(0)                  BUFNO                     01-DCB
00042D 000001                        2224+         DC     AL3(1)                  BUFCB                     01-DCB
000430 0000                          2225+         DC     AL2(0)             BUFL                           01-DCB
000432 4000                          2226+         DC     BL2'0100000000000000'             DSORG           01-DCB
000434 00000001                      2227+         DC     A(1)                     IOBAD                    01-DCB

                                     2229+*                     FOUNDATION EXTENSION                        01-DCB

000438 40                            2231+         DC     BL1'01000000'                  BFTEK,BFLN,HIARCHY 01-DCB
000439 000001                        2232+         DC     AL3(1)                  EODAD                     01-DCB
00043C 90                            2233+         DC     BL1'10010000'           RECFM                     01-DCB
00043D 000000                        2234+         DC     AL3(0)                  EXLST                     01-DCB

                                     2236+*                     FOUNDATION BLOCK                            01-DCB

000440 E2E8E2C9D5404040              2238+         DC     CL8'SYSIN'              DDNAME                    01-DCB
000448 02                            2239+         DC     BL1'00000010'           OFLGS                     01-DCB
000449 00                            2240+         DC     BL1'00000000'                          IFLG       01-DCB
00044A 5000                          2241+         DC     BL2'0101000000000000'   MACR                      01-DCB

                                     2243+*                     BSAM-BPAM-QSAM INTERFACE                    01-DCB

00044C 00                            2245+         DC     BL1'00000000'                                RER1 01-DCB
00044D 000001                        2246+         DC     AL3(1)                  CHECK, GERR, PERR         01-DCB
000450 00000001                      2247+         DC     A(1)                    SYNAD                     01-DCB
000454 0000                          2248+         DC     H'0'                    CIND1, CIND2              01-DCB
000456 0000                          2249+         DC     AL2(0)                  BLKSIZE                   01-DCB
000458 00000000                      2250+         DC     F'0'                    WCPO, WCPL, OFFSR, OFFSW  01-DCB
00045C 00000001                      2251+         DC     A(1)                    IOBA                      01-DCB
000460 00                            2252+         DC     AL1(0)                  NCP                       01-DCB
000461 000001                        2253+         DC     AL3(1)                  EOBR, EOBAD               01-DCB

                                     2255+*                          QSAM INTERFACE                         01-DCB

000464 00000001                      2257+         DC     A(1)                     RECAD                    01-DCB
000468 0000                          2258+         DC     H'0'                    QSWS                      01-DCB
00046A 0050                          2259+         DC     AL2(80)         LRECL                             01-DCB
00046C 00                            2260+         DC     BL1'00000000'           EROPT                     01-DCB
00046D 000001                        2261+         DC     AL3(1)                  CNTRL                     01-DCB
000470 00000000                      2262+         DC     F'0'                    PRECL                     01-DCB
000474 00000001                      2263+         DC     A(1)                    EOB                       01-DCB
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                          X390 3.1.04  2012/08/17 13.13

                                     2264=*             SYNAD=SYNAD    (ASSEMBLED IN IEX00001)                  00222001
                                     2265=*             EODAD=EODADIN  (INSERTED BY IEX11)                      00223001
000478                00478 00278    2266=         ORG   PRELPOOL                                               00224001
000278                               2267=PBTAB2   DS    CL510          PROGR. BLOCK TABLE 2          20-50      00225001
000478                               2268=         DS    0F                                                     00226001
000478                               2269=PBTAB1   DS    CL255          PROGR. BLOCK TABLE 1          11-20      00227001
000577                00577 00478    2270=         ORG   PBTAB1                                                 00228001
000478                               2271=FSTAB    DS    CL255          FOR STATEMENT TABLE           30-40      00229001
                                     2272=*                             DCB FOR SYSUT1                11-30      00230001
                                     2273=SYSUT1   DCB   DDNAME=SYSUT1,                                        X00231001
                                         =               DSORG=PS,                                             X00232001
                                         =               MACRF=(R,W),                                          X00233001
                                         =               RECFM=F                                                00234001


                                     2275+*                       DATA CONTROL BLOCK                            01-DCB
                                     2276+*                                                                     01-DCB
000577 00
000578                               2277+SYSUT1   DC    0F'0'                 ORIGIN ON WORD BOUNDARY          01-DCB

                                     2279+*                       DIRECT ACCESS DEVICE INTERFACE                01-DCB

000578 0000000000000000              2281+         DC    BL16'0'                FDAD,DVTBL                      01-DCB
000588 00000000                      2282+         DC    A(0)                   KEYLE,DEVT,TRBAL                01-DCB

                                     2284+*                       COMMON ACCESS METHOD INTERFACE                01-DCB

00058C 00                            2286+         DC    AL1(0)                BUFNO                            01-DCB
00058D 000001                        2287+         DC    AL3(1)                BUFCB                            01-DCB
000590 0000                          2288+         DC    AL2(0)           BUFL                                  01-DCB
000592 4000                          2289+         DC    BL2'0100000000000000'          DSORG                   01-DCB
000594 00000001                      2290+         DC    A(1)                   IOBAD                           01-DCB

                                     2292+*                       FOUNDATION EXTENSION                          01-DCB

000598 00                            2294+         DC    BL1'00000000'                BFTEK,BFLN,HIARCHY        01-DCB
000599 000001                        2295+         DC    AL3(1)                EODAD                            01-DCB
00059C 80                            2296+         DC    BL1'10000000'         RECFM                            01-DCB
00059D 000000                        2297+         DC    AL3(0)                EXLST                            01-DCB

                                     2299+*                       FOUNDATION BLOCK                              01-DCB

0005A0 E2E8E2E4E3F14040              2301+         DC    CL8'SYSUT1'           DDNAME                           01-DCB
0005A8 02                            2302+         DC    BL1'00000010'         OFLGS                            01-DCB
0005A9 00                            2303+         DC    BL1'00000000'                        IFLG              01-DCB
0005AA 2020                          2304+         DC    BL2'0010000000100000'  MACR                            01-DCB

                                     2306+*                       BSAM-BPAM-QSAM INTERFACE                      01-DCB

0005AC 00                            2308+         DC    BL1'00000000'                                     RER1 01-DCB
0005AD 000001                        2309+         DC    AL3(1)                CHECK, GERR, PERR                01-DCB
0005B0 00000001                      2310+         DC    A(1)                  SYNAD                            01-DCB
0005B4 0000                          2311+         DC    H'0'                  CIND1, CIND2                     01-DCB
0005B6 0000                          2312+         DC    AL2(0)                BLKSIZE                          01-DCB
0005B8 00000000                      2313+         DC    F'0'                  WCPO, WCPL, OFFSR, OFFSW         01-DCB
0005BC 00000001                      2314+         DC    A(1)                  IOBA                             01-DCB
0005C0 00                            2315+         DC    AL1(0)                NCP                              01-DCB
0005C1 000001                        2316+         DC    AL3(1)                EOBR, EOBAD                      01-DCB

                                     2318+*                         BSAM-BPAM INTERFACE                         01-DCB

0005C4 00000001                      2320+         DC    A(1)                  EOBW                             01-DCB
0005C8 0000                          2321+         DC    H'0'                  DIRCT                            01-DCB
0005CA 0000                          2322+         DC    AL2(0)         LRECL                                   01-DCB
0005CC 00000001                      2323+         DC    A(1)                  CNTRL, NOTE, POINT               01-DCB
                                     2324=*             SYNAD=SYNAD,   (ASSEMBLED IN IEX00001)                  00235001
                                     2325=*             EODAD=EODAD1                                            00236001
                                     2326=*                                                                     00237001
0005D0                               2327=         DS    0F                                                     00238001
0005D0                               2328=SPTAB    DS    CL255          SCOPE TABLE                   11-30      00239001
0006D0                               2329=         DS    0F                                                     00240001
                      006CD          2330=GPTAB    EQU   *-3            GROUP TABLE                   11-30      00241001
0006D0                               2331=         DS    CL1510                                                 00242001
                                     2332=*                                                                     00243001
                                     2333=*        END OF SYMLIB PART OF COMMON WORK AREA                       00244001
                                     2334=*                                                                     00245001
                                     2335          COPY  WAEXT                                                  01927001
                                     2336=*                                                                     00001001
                                     2337=*        AREA USED BY COMPILATION PHASE                               00002001
                                     2338=*                                                                     00003001
000CB6                00CB6 00578    2339=         ORG   SYSUT1                                                 00004001
                                     2340=*                                                                     00005001
000578                               2341=RETADR   DS    17F                    SAVE AREA                       00006001
0005BC                               2342=PLACE14  DS    F                         -''-                         00007001
0005C0                               2343=RUTI     DS    9F                     GPR CONTROL                     00008001
0005E4                               2344=RUTR     DS    4F                     FLREG CONTROL                   00009001
0005F4                               2345=GPROLN   DS    H                      LABEL NR OF OBJ PRG ENTRY POINT 00010001
0005F6                               2346=KONSUM   DS    H                      WORKPLACE                       00011001
0005F8                               2347=WORKPL   DS    F                      WORKPLACE                       00012001
                      000C8          2348=IBUF1    EQU   SRCE1ADD               ADDR OF FIRST SOURCE BUFFER     00013001
0005FC                               2349=IBUF2    DS    A                        -''  SECOND     -''-          00014001
000600                               2350=SOURCEB  DS    A                        -''  CURRENT    -''-          00015001
000604                               2351=RSRCB    DS    A                        -''  READ       -''-          00016001
000608                               2352=OPBUF1   DS    A                      ADDR OF FIRST OPTAB BUFFER      00017001
00060C                               2353=OPBUF2   DS    A                        -''-  SECOND     -''-         00018001
000610                               2354=OPBUFB   DS    A                        -''-  CURRENT    -''-         00019001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000614                               2355=ROPTB    DS    A                         -''-  READ       -''-     00020001
000618                               2356=AOPTABE  DS    A                        ADDR OF CURRENT OPTAB ENTRY  00021001
00061C                               2357=LATAB    DS    A                        ADDR OF LABEL ADDR TABLE     00022001
                        0061C        2358=APBTAB4  EQU   LATAB                    ADDRESS OF PBTAB4            00023001
000620                               2359=SUTABCA  DS    A                        ADDR OF LAST USED SUTAB ENTRY 00024001
000624                               2360=STRETURN DS    F                        RETURN ADDRESS               00025001
000628                               2361=FREEMADR DS    A                        ADDR FOR FREEMAIN IN 50000   00026001
00062C                               2362=FREEMSIZ DS    F                        SIZE         -''-            00027001

000630                               2364=PBTAB3   DS    1024C                    PROGRAM BLOCK TABLE, 3RD VERS 00029001

000A30 0000000000000000              2366=IOTAB    DC    18X'00'                  LIST OF DATA SETS            00031001
000A42 0000                          2367=CII      DC    H'0'                     REGISTER CONTROL             00032001
000A44 0000                          2368=CIR      DC    H'0'                          -''-                    00033001
000A46 0000                          2369=RII      DC    H'0'                          -''-                    00034001
000A48 0000                          2370=RIR      DC    H'0'                          -''-                    00035001
000A4A 0000                          2371=OPDPBN   DC    H'0'                     PROGRAM BLOCK NO (BYTE 2 OF OPD 00036001
000A4C 0000                          2372=OPDADR   DC    H'0'                     BYTES 3 AND 4 OF OPERAND     00037001
000A4E 0000                          2373=OPDLN    DC    H'0'                     LABEL NUMBER TIMES FOUR      00038001
000A50 0000                          2374=ZEROHW   DC    H'0'                     ZEROES                       00039001
000A52 00                            2375=CFSN     DC    X'00'                    CURRENT FS NUMBER            00040001
000A53 FF                            2376=MAXFSN   DC    X'FF'                    MAX FS NUMBER                00041001
000A54 F000                          2377=CLEARDIS DC    X'F000'                  FOR CLEARING OF DISPLACEM PART 00042001
000A56 0004                          2378=ONEENTRY DC    H'4'                     SHORT, FOR INCR OF OT STACK PTR 00043001
000A58                  00A58 00A56  2379=         ORG   ONEENTRY                                              00044001
000A56 0008                          2380=         DC    H'8'                     LONG            -''-         00045001
000A58 10                            2381=PRECMASK DC    X'10'                    SHORT, TO MODIFY INSTRUCTIONS 00046001
000A59                  00A59 00A58  2382=         ORG   PRECMASK                                              00047001
000A58 00                            2383=         DC    X'00'                    LONG            -''-         00048001
000A59 00                            2384=NUMBBL   DC    X'00'                    RECORD COUNTER               00049001
000A5A                               2385=         DS    H                                                     00050001
000A5C 0000                          2386=SPBNST   DC    H'0'                     CURRENT PBN                  00051001
000A5E                               2387=         DS    H                                AND DISPLACEMENT     00052001
000A60 00FF                          2388=GPBN     DC    H'255'                   GLOBAL DSA CONTROL           00053001
000A62 0FFC                          2389=MAXOVERF DC    H'4092'                  SHORT, TO CHECK OT STACK OVERFL 00054001
000A64                  00A64 00A62  2390=         ORG   MAXOVERF                                              00055001
000A62 0FF8                          2391=         DC    H'4088'                  LONG            -''-         00056001
000A64                               2392=HALFW    DS    H                        WORKPLACE                    00057001
000A66                               2393=USPEI2   DS    H                        FOR ARRAY DECLA-             00058001
000A68                               2394=USPEI4   DS    H                                    RATION HANDLING 00059001
000A6A                               2395=WPLACE   DS    H                        FOR INSTRUCTION GENERATION   00060001
000A6C                               2396=XPLACE   DS    H                                                     00061001
000A6E                               2397=YPLACE   DS    H                                                     00062001
000A70                               2398=UPLACE   DS    H                                                     00063001
000A72                               2399=VPLACE   DS    C                                   -''-              00064001
000A73                               2400=STRDNAME DS    5C                       TO STORE OPERAND             00065001
000A78                               2401=CBVTAB   DS    CL48                     CALLED-BY-VALUE TABLE        00066001
000AA8                               2402=SUTABC   DS    CL768                    FOR SUBSCRIPT OPTIMIZATION   00067001
000DA8                  00DA8 00AA8  2403=         ORG   SUTABC                                                00068001
000AA8                               2404=DSTAB    DS    CL608                    DATA SET TABLE               00069001
000D08                  00D08 00000  2405          ORG   SAVEAREA                                              01928001
                                     2406          COPY  FSAREA                  COPY RUNTIME DSECT            01929001
                                     2407=*                                                                    00001001
                                     2408=*        COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY                  00002001
                                     2409=*                                                                    00003001
                                     2410=*        STATUS - LEVEL 2.1                                          00004001
                                     2411=*                                                                    00005001
                                     2412=*********************************************************************** 00006001
                                     2413=*                                                                    00007001
                                     2414=*        COMMON DATA AREA                                            00008001
                                     2415=*                                                                    00009001
                                     2416=*        FSAREA                                                      00010001
                                     2417=*                                                                    00011001
                                     2418=*********************************************************************** 00012001
                                     2419=*                                                                    00013001
                                     2420=*        DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL                  00014001
                                     2421=*        MODULES DURING THE EXECUTION                                00015001
                                     2422=*                                                                    00016001
                                     2423=*        ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY               00017001
                                     2424=*        SUBROUTINES) BY R12                                         00018001
                                     2425=*                                                                    00019001
                        00000        2426=FSAREA   EQU   *                                                     00020001
                                     2427=*                                                                    00021001
                                     2428=*        SAVE AREAS                                                  00022001
                                     2429=*                                                                    00023001
000000                               2430=         DS    18F                     STANDARD SAVE AREA            00024001
                        00048        2431=ASAVE    EQU   *-FSAREA                ALTERNATE SAVE AREA USED BY   00025001
000048                               2432=         DS    18F                     CERTAIN SUBROUTINES           00026001
                                     2433=*                                                                    00027001
                                     2434=*        MISCELLANEOUS WORK AREAS AND CONSTANTS                      00028001
                                     2435=*                                                                    00029001
                        00090        2436=FCTVALST EQU   *-FSAREA                TEMPORARY STORAGE FOR         00030001
000090                               2437=         DS    D                       FUNCTION VALUES               00031001
                        00098        2438=ASTLOC   EQU   *-FSAREA                DISPL FOR ADDR OF STAND LOCTN 00032001
000098 00000090                      2439=         DC    A(FSAREA+FCTVALST)                                    00033001
                        0009C        2440=BRRST    EQU   *-FSAREA                TEMPORARY SAVE REG BRR        00034001
                        0009C        2441=HW       EQU   BRRST                   TEMPORARY HALFWORD STORAGE    00035001
00009C                               2442=         DS    F                                                     00036001
                        000A0        2443=PROLREG  EQU   *-FSAREA                STORAGE FOR PBT AND LAT WHEN  00037001
0000A0                               2444=         DS    2A                      A PROCEDURE IS FORMAL PARAM   00038001
                                     2445=*                                                                    00039001
                                     2446=*        HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE      00040001
                                     2447=*                                                                    00041001
0000A8                               2448=         DS    0H                                                    00042001
0000A8 00                            2449=         DC    X'00'                                                 00043001
                        000A9        2450=PROLPBN  EQU   *-FSAREA                STORAGE FOR CALLED PBN        00044001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                          X390 3.1.04  2012/08/17 13.13

0000A9 00                            2451=         DC    X'00'                                                  00045001
                        000AA        2452=EIGHT    EQU   *-FSAREA                CONST FOR REDUCING RAS         00046001
0000AA 0008                          2453=         DC    H'8'                                                   00047001
                                     2454=*                                                                     00048001
0000AC                               2455=         DS    0F                                                     00049001
                        000AC        2456=ADSTAB   EQU   *-FSAREA                ADDR OF DSTABLE                00050001
0000AC                               2457=         DS    A                       IN THE OBJECT PROGRAM          00051001
                        000B0        2458=ANOTTAB  EQU   *-FSAREA                ADDR OF NOTE TABLE             00052001
0000B0                               2459=         DS    A                       (INSERTED BY THE OPEN ROUTINE) 00053001
                                     2460=*                                                                     00054001
                        000B4        2461=IHIFSAST EQU   *                                                      00055001
                        000B4        2462=PGOPSW   EQU   *-FSAREA                PROGRAM CHECK OLD PSW          00056001
0000B4                               2463=         DS    2F                                                     00057001
                        000BC        2464=FSAPICA  EQU   *-FSAREA                OLD PICA ADDR                  00058001
0000BC 00000000                      2465=         DC    F'0'                                                   00059001
                        000C0        2466=SCRCS    EQU   *-FSAREA                SEMICOLON NUMBER               00060001
0000C0                               2467=         DS    H                                                      00061001
                        000C2        2468=DTSW     EQU   *-FSAREA                OPTION SWITCHES                00062001
                        000C2        2469=OPTSW    EQU   DTSW                                                   00063001
0000C2 00                            2470=         DC    X'00'                   DUMP-80, TRACE-40, SHORT-20    00064001
                        000C3        2471=FSAERCOD EQU   *-FSAREA                ERROR CODE FOR ERROR ROUTINE   00065001
0000C3                               2472=         DS    C                                                      00066001
                                     2473=*                                                                     00067001
                                     2474=*        RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER            00068001
                                     2475=*                                                                     00069001
0000C4                               2476=         DS    0F                                                     00070001
                        000C4        2477=IHIFSARS EQU   *                                                      00071001
                        000C4        2478=RASSTART EQU   *-FSAREA                ADDR OF FIRST ENTRY IN RAS-8   00072001
0000C4                               2479=         DS    F                                                      00073001
                        000C8        2480=RASPT    EQU   *-FSAREA                RAS POINTER FROM TOP           00074001
0000C8                               2481=         DS    F                                                      00075001
                        000CC        2482=RASEND   EQU   *-FSAREA                ADDR OF LAST  ENTRY IN RAS+8   00076001
0000CC                               2483=         DS    F                                                      00077001
                        000D0        2484=RASPB    EQU   *-FSAREA                RAS POINTER FROM BOTTOM        00078001
0000D0                               2485=         DS    F                                                      00079001
                                     2486=*                                                                     00080001
                                     2487=*        LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES     00081001
                                     2488=*                                                                     00082001
0000D4                               2489=BRLIST   DS    0F                                                     00083001
                        000D4        2490=CAP1     EQU   *-FSAREA                FIRST PART CAPS                00084001
0000D4 4700 0000              00000  2491=         NOP   0                                                      00085001
                        000D8        2492=CAP2     EQU   *-FSAREA                SECOND PART CAPS               00086001
0000D8 4700 0000              00000  2493=         NOP   0                                                      00087001
                        000DC        2494=PROLOGP  EQU   *-FSAREA                PROLOGUE FORMAL PARAMETER ENTRY 00088001
                        000DC        2495=PROLOGFP EQU   PROLOGP                                                00089001
0000DC 4700 0000              00000  2496=         NOP   0                                                      00090001
                        000E0        2497=PROLOG   EQU   *-FSAREA                PROLOGUE PROGRAM USUAL ENTRY   00091001
0000E0 4700 0000              00000  2498=         NOP   0                                                      00092001
                        000E4        2499=RETPROG  EQU   *-FSAREA                DISPLACEMENT RETURN PROGRAM    00093001
0000E4 4700 0000              00000  2500=         NOP   0                                                      00094001
                        000E8        2501=EPILOGP  EQU   *-FSAREA                EPILOGUE PROGRAM,PROCEDURE ENTRY 00095001
0000E8 4700 0000              00000  2502=         NOP   0                                                      00096001
                        000EC        2503=EPILOGB  EQU   *-FSAREA                EPILOGE PROGRAM,BETA-BLOCK ENTRY 00097001
0000EC 4700 0000              00000  2504=         NOP   0                                                      00098001
                        000F0        2505=EPILPR3  EQU   *-FSAREA                EPILOGUE PROGRAM ENTRY 3       00099001
0000F0 4700 0000              00000  2506=         NOP   0                                                      00100001
                        000F4        2507=CSWE1    EQU   *-FSAREA                FIRST PART CSWES               00101001
0000F4 4700 0000              00000  2508=         NOP   0                                                      00102001
                        000F8        2509=CSWE2    EQU   *-FSAREA                SECOND PART CSWES              00103001
0000F8 4700 0000              00000  2510=         NOP   0                                                      00104001
                        000FC        2511=LOADPP   EQU   *-FSAREA                LOAD PRECOMPILED PROC ROUTINE  00105001
0000FC 4700 0000              00000  2512=         NOP   0                                                      00106001
                        00100        2513=TRACE    EQU   *-FSAREA                                               00107001
000100 D200 0000 0000 00000 00000    2514=         MVC   0(0),0                                                 00108001
000106 4700 0000              00000  2515=         NOP   0                                                      00109001
00010A 4700 0000              00000  2516=         NOP   0                                                      00110001
                        0010E        2517=TERMNTE  EQU   *-FSAREA                NORMAL TERMINATION EXIT        00111001
00010E 4700 0000              00000  2518=         NOP   0                                                      00112001
                        00112        2519=BCR      EQU   *-FSAREA                                               00113001
000112 0700                          2520=         BCR   0,0                     VARIABLE CONDITIONAL BRANCH    00114001
                        00114        2521=GETMSTO  EQU   *-FSAREA                                               00115001
000114 4700 0000              00000  2522=         NOP   0                                                      00116001
                                     2523=*                                                                     00117001
                        00118        2524=VALUCALL EQU   *-FSAREA                                               00118001
000118 4700 0000              00000  2525=         NOP   0                                                      00119001
                        0011C        2526=IORLST   EQU   *-FSAREA                                               00120001
00011C 4700 0000              00000  2527=         NOP   0                                                      00121001
                                     2528=*                                                                     00122001
                        001CC        2529=FSAERR   EQU   X'1CC'                  DISPL  FOR ERROR LIST          00123001
                                     2530=*                                                                     00124001
                                     2531=*        DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA                 00125001
                                     2532=*                                                                     00126001
                        0020C        2533=OUTOFB   EQU   FSAERR+4*16                                            00127001
                        00218        2534=NUMBIND  EQU   FSAERR+4*19                                            00128001
                        00208        2535=ARRAYBD  EQU   FSAERR+4*15                                            00129001
                        0026C        2536=ERROR40  EQU   FSAERR+4*40                                            00130001
                        00224        2537=OERR22   EQU   FSAERR+4*22                                            00131001
                        00210        2538=ENDLESL  EQU   FSAERR+4*17                                            00132001
                        00220        2539=OERR21   EQU   FSAERR+4*21                                            00133001
                                     2540=*                                                                     00134001
                                     2541 *                              FOR OP CODE GENERATION OFFSETS 01930001
                                     2542          COPY  IEX50002                IEX50002 (RECOVERED)           01931001
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

                                    2544=*
                                    2545=***********************************************************************
                                    2546=*
                                    2547=*        THIS SOURCE FOR IEX50002 WAS RECOVERED BY DISASSEMBLY OF
                                    2548=*        THE CSECT IEX50002 IN LOAD MODULE IEX50
                                    2549=*
                                    2550=***********************************************************************
                                    2551=*
001346                 00000 06286  2552=IEX50000 CSECT
                                    2553=*
                                    2554=*        NOTE -
                                    2555=*        ALL THE CP PROGRAMS IN THIS CSECT IEX50002 ESTABLISH
                                    2556=*        ADDRESSABILITY FOR BASE (R12) FROM THE FIRST CP IN THE
                                    2557=*        CSECT WHICH IS CP6
                                    2558=*        ALL SUBSEQUENT CPS OTHER THAN CP6 RESET BASE BACK TO
                                    2559=*        CP6 BY LOADING R12. THIS IS ONLY DONE IN IEX50002, NO
                                    2560=*        OTHER MODULES USE THIS TECHNIQUE
                                    2561=*        ROUTINES AND DATA AREAS ARE SHARED ACROSS ALL THE CPS
                                    2562=*        IN THIS CSECT WITH BRANCHES INTO AND OUT OF THE CPS
                                    2563=*
                                    2564=***********************************************************************
                                    2565=*
                                    2566=*        COMPILER PROGRAM - CP6
                                    2567=*
                                    2568=***********************************************************************
                                    2569=*
001346 0700                         2570=         CNOP  0,8
                  R:C  01348        2571=         USING CP6,R12
001348 9101 D080       00080        2572=CP6      TM    COMPFLGS,OPERAND
00134C 4780 C012             0135A  2573=         BZ    CP6A
001350 4540 5304             0034C  2574=         BAL   R4,SERR4
001354 00A4                         2575=         DC    H'164'                ERROR 164
                                    2576=*
001356 4190 9005             00005  2577=         LA    R9,5(,R9)
00135A 4540 5E30             00E78  2578=CP6A     BAL   R4,MOVEOPTK
00135E D200 A000 8000 00000 00000   2579=         MVC   0(1,R10),0(R8)
001364 41BB 0122             00122  2580=         LA    R11,290(R11)
001368 9518 A000       00000        2581=CP6B     CLI   0(R10),X'18'
00136C 0775                         2582=         BNER  R5                    ¬=, RETURN TO SUBSTART
00136E 4B90 5176             001BE  2583=         SH    R9,KH10
001372 4540 5E38             00E80  2584=         BAL   R4,MOVEOPDK
001376 1B11                         2585=         SR    R1,R1
001378 4310 DA52             00A52  2586=         IC    R1,CFSN
00137C 4219 0000             00000  2587=         STC   R1,0(R9)
001380 4111 0001             00001  2588=         LA    R1,1(R1)
001384 4210 DA52             00A52  2589=         STC   R1,CFSN
001388 4311 D477             00477  2590=         IC    R1,SYSIN+95(R1)
00138C 4219 0001             00001  2591=         STC   R1,1(R9)
001390 07F5                         2592=         BR    R5                    RETURN TO SUBSTART
                                    2593=*
                                    2594=***********************************************************************
                                    2595=*
                                    2596=*        COMPILER PROGRAM - CP40
                                    2597=*
                                    2598=***********************************************************************
                                    2599=*
001392 58C0 51BC             00204  2600=CP40     L     R12,SCPTAB+4*6        R12 -> CP6
001396 4140 C086             013CE  2601=         LA    R4,CP40A
00139A 4530 5F08             00F50  2602=         BAL   R3,OPDTEST
00139E 9108 9000       00000        2603=         TM    0(R9),X'08'
0013A2 4710 C06E             013B6  2604=         BO    CP40B
0013A6 91C0 9001       00001        2605=         TM    1(R9),X'C0'
0013AA 4780 C07A             013C2  2606=         BZ    CP40C
0013AE 9110 9000       00000        2607=         TM    0(R9),X'10'
0013B2 4710 C07A             013C2  2608=         BO    CP40C
0013B6 4540 5380             003C8  2609=CP40B    BAL   R4,SERR1
0013BA 00BE                         2610=         DC    H'190'                ERROR 190
                                    2611=*
0013BC D204 9000 5182 00000 001CA   2612=CP40E    MVC   0(5,R9),API
0013C2 4540 5E44             00E8C  2613=CP40C    BAL   R4,TARITHM
0013C6 47F0 C086             013CE  2614=         B     CP40A                 +00 NO ERROR
0013CA 47F0 C074             013BC  2615=         B     CP40E                 +04 ERROR 163
                                    2616=*
0013CE 4540 5E30             00E78  2617=CP40A    BAL   R4,MOVEOPTK
0013D2 922D A000       00000        2618=         MVI   0(R10),X'2D'
0013D6 9180 D080       00080        2619=         TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?
0013DA 0715                         2620=         BOR   R5                    YES, RETURN TO SUBSTART
0013DC 9130 9001       00001        2621=         TM    1(R9),X'30'
0013E0 47B0 C0CE             01416  2622=         BNM   CP40F
0013E4 9120 9001       00001        2623=         TM    1(R9),X'20'
0013E8 4710 C0CE             01416  2624=         BO    CP40F
0013EC 4540 593C             00984  2625=         BAL   R4,ROUTINE1
0013F0 4810 DA6A             00A6A  2626=         LH    R1,WPLACE
0013F4 4111 0004             00004  2627=         LA    R1,4(R1)
0013F8 4010 C18E             014D6  2628=         STH   R1,CP40G+2
0013FC D300 C18E DA72 014D6 00A72   2629=         MVZ   CP40G+2(1),VPLACE
001402 4120 C18C             014D4  2630=         LA    R2,CP40G
001406 45E0 5588             005D0  2631=         BAL   R14,GENTXTS
00140A 0008                         2632=         DC    H'8'                  GENERATE 8 BYTES
                                    2633=*
00140C 4540 578A             007D2  2634=         BAL   R4,OPDREC
001410 D200 9002 DA5D 00002 00A5D   2635=         MVC   2(1,R9),SPBNST+1
001416 4540 5706             0074E  2636=CP40F    BAL   R4,CLEARRG
00141A 4540 CBA8             01EF0  2637=         BAL   R4,CP40H
00141E D201 9007 9009 00007 00009   2638=         MVC   7(2,R9),9(R9)
001424 4540 CBA8             01EF0  2639=CP40I    BAL   R4,CP40H
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

001428 4A70 DA56              00A56  2640=          AH    R7,ONEENTRY                                              00098001
00142C 4070 D5F8              005F8  2641=          STH   R7,WORKPL                                                00099001
001430 D201 900B D5F8 0000B 005F8  2642=          MVC   11(2,R9),WORKPL                                          00100001
001436 910C 9006        00006        2643=          TM    6(R9),X'0C'                                              00101001
00143A 4780 C182              014CA  2644=          BZ    CP40J                                                    00102001
00143E 5810 D618              00618  2645=CP40K     L     R1,AOPTABE                                               00103001
001442 D500 1000 9005 00000 00005  2646=          CLC   0(1,R1),5(R9)                                            00104001
001448 4720 C122              0146A  2647=          BH    CP40M                                                    00105001
00144C 4780 C110              01458  2648=          BE    CP40L                                                    00106001
001450 4540 50EA              00132  2649=          BAL   R4,NXTOPT                                                00107001
001454 47F0 C0F6              0143E  2650=          B     CP40K                                                    00108001
                                     2651=*                                                                        00109001
001458 9602 9006        00006        2652=CP40L     OI    6(R9),X'02'                                              00110001
00145C 9200 CFEC        02334        2653=          MVI   WA2_B,X'00'                                              00111001
001460 D201 CFF4 DA50 0233C 00A50  2654=          MVC   WA2_C,ZEROHW                                             00112001
001466 45E0 CE70              021B8  2655=          BAL   R14,CP40Q                                                00113001
00146A 9108 9006        00006        2656=CP40M     TM    6(R9),X'08'                                              00114001
00146E 4710 C12E              01476  2657=          BO    CP40R                                                    00115001
001472 47F0 C158              014A0  2658=          B     CP40S                                                    00116001
                                     2659=*                                                                        00117001
001476 4A70 DA56              00A56  2660=CP40R     AH    R7,ONEENTRY                                              00118001
00147A 4070 D5F8              005F8  2661=          STH   R7,WORKPL                                                00119001
00147E 91F0 9006        00006        2662=          TM    6(R9),X'F0'                                              00120001
001482 4780 C17A              014C2  2663=          BZ    CP40T                                                    00121001
001486 4710 C146              0148E  2664=          BO    CP40U                                                    00122001
00148A 4A70 DA56              00A56  2665=          AH    R7,ONEENTRY                                              00123001
00148E 4070 D5FA              005FA  2666=CP40U     STH   R7,WORKPL+2                                              00124001
001492 D203 900D D5F8 0000D 005F8  2667=CP40V     MVC   13(4,R9),WORKPL                                          00125001
001498 4710 C172              014BA  2668=          BO    CP40W                                                    00126001
00149C 4A70 DA56              00A56  2669=          AH    R7,ONEENTRY                                              00127001
0014A0 9102 9006        00006        2670=CP40S     TM    6(R9),X'02'                                              00128001
0014A4 4780 C172              014BA  2671=          BZ    CP40W                                                    00129001
0014A8 4A70 DA56              00A56  2672=          AH    R7,ONEENTRY                                              00130001
0014AC 4070 D5F8              005F8  2673=          STH   R7,WORKPL                                                00131001
0014B0 D201 9011 D5F8 00011 005F8  2674=          MVC   17(2,R9),WORKPL                                          00132001
0014B6 45E0 CBCC              01F14  2675=          BAL   R14,CP40X                                                00133001
0014BA 5060 CFE8              02330  2676=CP40W     ST    R6,WA2_A+2                                               00134001
0014BE 47F0 C182              014CA  2677=          B     CP40J                                                    00135001
                                     2678=*                                                                        00136001
0014C2 4400 C14A              01492  2679=CP40T     EX    R0,CP40V                                                 00137001
0014C6 9200 9012        00012        2680=          MVI   18(R9),0                                                 00138001
0014CA 4070 D5F8              005F8  2681=CP40J     STH   R7,WORKPL                                                00139001
0014CE 4540 58BA              00902  2682=          BAL   R4,MAXCH                                                 00140001
0014D2 07F5                          2683=          BR    R5                                                       00141001
                                     2684=*                                                                        00142001
0014D4 9108 A000        00000        2685=CP40G     TM    0(R10),X'08'           *** GENERATED CODE ***            00143001
0014D8 471D 0224              00224  2686=          BO    548(R13)               *** GENERATED CODE ***            00144001
                                     2687=*                                                                        00145001
                                     2688=********************************************************************** 00146001
                                     2689=*                                                                        00147001
                                     2690=*         COMPILER PROGRAM - CP43                                        00148001
                                     2691=*                                                                        00149001
                                     2692=********************************************************************** 00150001
                                     2693=*                                                                        00151001
0014DC 58C0 51BC              00204  2694=CP43      L     R12,SCPTAB+4*6         R12 -> CP6                        00152001
0014E0 4140 CB54              01E9C  2695=          LA    R4,CP43A                                                 00153001
0014E4 4530 5F08              00F50  2696=          BAL   R3,OPDTEST                                               00154001
0014E8 4540 5E44              00E8C  2697=          BAL   R4,TARITHM                                               00155001
0014EC 47F0 C1AC              014F4  2698=          B     CP43B                  +00                               00156001
0014F0 47F0 CB54              01E9C  2699=          B     CP43A                  +04 ERROR                         00157001
                                     2700=*                                                                        00158001
0014F4 9180 D080        00080        2701=CP43B     TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?               00159001
0014F8 4710 CB54              01E9C  2702=          BO    CP43A                  YES, BRANCH                       00160001
0014FC 181A                          2703=          LR    R1,R10                                                   00161001
0014FE 0610                          2704=          BCTR  R1,R0                                                    00162001
001500 9518 1000        00000        2705=          CLI   0(R1),X'18'                                              00163001
001504 4770 C1C8              01510  2706=          BNE   CP43C                                                    00164001
001508 91F2 900B        0000B        2707=          TM    11(R9),X'F2'                                             00165001
00150C 4780 C334              0167C  2708=          BZ    CP43D                                                    00166001
001510 5810 C358              016A0  2709=CP43C     L     R1,CP43E                                                 00167001
001514 58C0 51F4              0023C  2710=          L     R12,SCPTAB+4*20        R12 -> CP20                       00168001
001518 9216 A000        00000        2711=          MVI   0(R10),X'16'                                             00169001
00151C 07F1                          2712=          BR    R1                                                       00170001
                                     2713=*                                                                        00171001
00151E 41AA 0001              00001  2714=DJH1E43   LA    R10,1(R10)             ENTRY FROM CP20 VIA ADCON         00172001
001522 922D A000        00000        2715=          MVI   0(R10),X'2D'                                             00173001
001526 9180 9000        00000        2716=          TM    0(R9),X'80'                                              00174001
00152A 4710 C1EA              01532  2717=          BO    CP43F                                                    00175001
00152E 4A70 DA56              00A56  2718=          AH    R7,ONEENTRY                                              00176001
001532 951C 8000        00000        2719=CP43F     CLI   0(R8),X'1C'                                              00177001
001536 4780 C2DA              01622  2720=          BE    CP43G                                                    00178001
00153A 9519 8000        00000        2721=          CLI   0(R8),X'19'                                              00179001
00153E 4780 C27C              015C4  2722=          BE    CP43H                                                    00180001
001542 951B 8000        00000        2723=          CLI   0(R8),X'1B'                                              00181001
001546 4780 C2A6              015EE  2724=          BE    CP43P                                                    00182001
00154A 9601 9006        00006        2725=          OI    6(R9),X'01'                                              00183001
00154E D201 C212 9007 0155A 00007  2726=          MVC   CP43I+2(2),7(R9)                                         00184001
001554 4520 55A2              005EA  2727=          BAL   R2,GENTXT4                                               00185001
001558 58FC 0000              00000  2728=CP43I     L     R15,0(R12)             *** GENERATED CODE ***            00186001
00155C 91F0 9006        00006        2729=          TM    6(R9),X'F0'                                              00187001
001560 4780 C25C              015A4  2730=          BZ    CP43J                                                    00188001
001564 45E0 C244              0158C  2731=          BAL   R14,CP43K                                                00189001
001568 D201 C352 900B 0169A 0000B  2732=          MVC   CP43L1+2(2),11(R9)                                       00190001
00156E 4120 C34A              01692  2733=          LA    R2,CP43L                                                 00191001
001572 45E0 5588              005D0  2734=          BAL   R14,GENTXTS                                              00192001
001576 000C                          2735=          DC    H'12'                  GENERATE 12 BYTES                 00193001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

                                     2736=*                                                                      00194001
001578 9102 9006        00006        2737=         TM    6(R9),X'02'                                             00195001
00157C 4780 C23C              01584  2738=         BZ    CP43M                                                   00196001
001580 45E0 CBCC              01F14  2739=         BAL   R14,CP40X                                               00197001
001584 5060 CFE8              02330  2740=CP43M    ST    R6,WA2_A+2                                              00198001
001588 47F0 CB66              01EAE  2741=         B     CP43N                                                   00199001
                                     2742=*                                                                      00200001
00158C 910A 9006        00006        2743=CP43K    TM    6(R9),X'0A'                                             00201001
001590 07EE                          2744=         BNOR  R14                                                     00202001
001592 D201 C258 900D 015A0 0000D    2745=         MVC   CP43Q+2(2),13(R9)                                       00203001
001598 4520 55A6              005EE  2746=         BAL   R2,GENTXT6                                              00204001
00159C 1BEE                          2747=         SR    R14,R14                    *** GENERATED CODE ***       00205001
00159E 50EA 0000              00000  2748=CP43Q    ST    R14,0(R10)                 *** GENERATED CODE ***       00206001
0015A2 07FE                          2749=         BR    R14                                                     00207001
                                     2750=*                                                                      00208001
0015A4 41E0 C272              015BA  2751=CP43J    LA    R14,CP43R                                               00209001
0015A8 9108 9006        00006        2752=CP43S    TM    6(R9),X'08'                                             00210001
0015AC 078E                          2753=         BZR   R14                                                     00211001
0015AE 4520 55A2              005EA  2754=         BAL   R2,GENTXT4                                              00212001
0015B2 4100 0001              00001  2755=         LA    R0,1                       *** GENERATED CODE ***       00213001
0015B6 47F0 C244              0158C  2756=         B     CP43K                                                   00214001
                                     2757=*                                                                      00215001
0015BA 4520 559E              005E6  2758=CP43R    BAL   R2,GENTXT2                                              00216001
0015BE 05FF                          2759=         BALR  R15,R15                    *** GENERATED CODE ***       00217001
0015C0 47F0 CB66              01EAE  2760=         B     CP43N                                                   00218001
                                     2761=*                                                                      00219001
0015C4 91F0 9006        00006        2762=CP43H    TM    6(R9),X'F0'                                             00220001
0015C8 47E0 CB66              01EAE  2763=         BNO   CP43N                                                   00221001
0015CC D201 C2A4 900B 015EC 0000B    2764=         MVC   CP43T+2(2),11(R9)                                       00222001
0015D2 4120 C29C              015E4  2765=         LA    R2,CP43U                                                00223001
0015D6 45E0 5588              005D0  2766=         BAL   R14,GENTXTS                                             00224001
0015DA 000A                          2767=         DC    H'10'                      GENERATE 10 BYTES            00225001
                                     2768=*                                                                      00226001
0015DC 92FF DA61        00A61        2769=         MVI   GPBN+1,X'FF'                                            00227001
0015E0 47F0 CB66              01EAE  2770=         B     CP43N                                                   00228001
                                     2771=*                                                                      00229001
0015E4 05E0                          2772=CP43U    BALR  R14,R0                     *** GENERATED CODE ***       00230001
0015E6 41EE 0008              00008  2773=         LA    R14,8(R14)                 *** GENERATED CODE ***       00231001
0015EA 50EA 0000              00000  2774=CP43T    ST    R14,0(R10)                 *** GENERATED CODE ***       00232001
                                     2775=*                                                                      00233001
0015EE 4540 CBA8              01EF0  2776=CP43P    BAL   R4,CP40H                                                00234001
0015F2 5A10 D61C              0061C  2777=         A     R1,LATAB                                                00235001
0015F6 D203 1000 CFE8 00000 02330    2778=         MVC   0(4,R1),WA2_A+2                                         00236001
0015FC D201 C2CE 900B 01616 0000B    2779=         MVC   CP43V+2(2),11(R9)                                       00237001
001602 D201 C2D0 9009 01618 00009    2780=         MVC   CP43V+4(2),9(R9)                                        00238001
001608 96C0 C2D0        01618        2781=         OI    CP43V+4,X'C0'                                           00239001
00160C 96A0 C2CE        01616        2782=         OI    CP43V+2,X'A0'                                           00240001
001610 4520 55A6              005EE  2783=         BAL   R2,GENTXT6                 GENERATE 6 BYTES             00241001
001614 D203 A000 C000 00000 00000    2784=CP43V    MVC   0(4,R10),0(R12)            *** GENERATED CODE ***       00242001
00161A 45E0 C244              0158C  2785=         BAL   R14,CP43K                                               00243001
00161E 47F0 CB66              01EAE  2786=         B     CP43N                                                   00244001
                                     2787=*                                                                      00245001
001622 9101 9006        00006        2788=CP43G    TM    6(R9),X'01'                                             00246001
001626 4710 C2FC              01644  2789=         BO    CP43W                                                   00247001
00162A D501 D0A2 9009 000A2 00009    2790=         CLC   LN(2),9(R9)                                             00248001
001630 4770 CB66              01EAE  2791=         BNE   CP43N                                                   00249001
001634 4810 D0A2              000A2  2792=         LH    R1,LN                                                   00250001
001638 4B10 5172              001BA  2793=         SH    R1,KH8                                                  00251001
00163C 4010 D0A2              000A2  2794=         STH   R1,LN                                                   00252001
001640 47F0 CB66              01EAE  2795=         B     CP43N                                                   00253001
                                     2796=*                                                                      00254001
001644 91F0 9006        00006        2797=CP43W    TM    6(R9),X'F0'                                             00255001
001648 41AA 0001              00001  2798=         LA    R10,1(R10)                                              00256001
00164C 41E0 C804              01B4C  2799=         LA    R14,CP43X                                               00257001
001650 4780 C260              015A8  2800=         BZ    CP43S                                                   00258001
001654 45E0 C244              0158C  2801=         BAL   R14,CP43K                                               00259001
001658 4540 CBBC              01F04  2802=         BAL   R4,CP43Y                                                00260001
00165C 4010 C32E              01676  2803=         STH   R1,CP43Z+4                                              00261001
001660 96C0 C32E        01676        2804=         OI    CP43Z+4,X'C0'                                           00262001
001664 D201 C32C 900B 01674 0000B    2805=         MVC   CP43Z+2(2),11(R9)                                       00263001
00166A 96A0 C32C        01674        2806=         OI    CP43Z+2,X'A0'                                           00264001
00166E 4520 55A6              005EE  2807=         BAL   R2,GENTXT6                 GENERATE 6 BYTES             00265001
001672 D203 A000 C000 00000 00000    2808=CP43Z    MVC   0(4,R10),0(R12)            *** GENERATED CODE ***       00266001
001678 47F0 C998              01CE0  2809=         B     CP49_X                                                  00267001
                                     2810=*                                                                      00268001
00167C 9108 900B        0000B        2811=CP43D    TM    11(R9),X'08'                                            00269001
001680 4780 C1C8              01510  2812=         BZ    CP43C                                                   00270001
001684 D204 9005 9000 00005 00000    2813=         MVC   5(5,R9),0(R9)                                           00271001
00168A 4199 0005              00005  2814=         LA    R9,5(R9)                                                00272001
00168E 47F0 C1EA              01532  2815=         B     CP43F                                                   00273001
                                     2816=*                                                                      00274001
001692 05E0                          2817=CP43L    BALR  R14,R0                     *** GENERATED CODE ***       00275001
001694 41EE 000A              0000A  2818=         LA    R14,10(R14)                *** GENERATED CODE ***       00276001
001698 50EA 0000              00000  2819=CP43L1   ST    R14,0(R10)                 *** GENERATED CODE ***       00277001
00169C 07FF                          2820=         BR    R15                                                     00278001
                                     2821=*                                                                      00279001
00169E 0000
0016A0 000033CC                      2822=CP43E    DC    A(BIC2)                    INTERNAL ENTRY TO CP20       00280001
                                     2823=*                                                                      00281001
                                     2824=*********************************************************************** 00282001
                                     2825=*                                                                      00283001
                                     2826=*        COMPILER PROGRAM - CP45                                       00284001
                                     2827=*                                                                      00285001
                                     2828=*********************************************************************** 00286001
                                     2829=*                                                                      00287001
0016A4 58C0 51BC              00204  2830=CP45     L     R12,SCPTAB+4*6             R12 -> CP6                   00288001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

0016A8 4140 CB86             01ECE  2831=         LA    R4,CP45A                                                    00289001
0016AC 4530 5F08             00F50  2832=         BAL   R3,OPDTEST                                                  00290001
0016B0 4540 5E44             00E8C  2833=         BAL   R4,TARITHM                                                  00291001
0016B4 47F0 C374             016BC  2834=         B     CP45B                  +00                                  00292001
0016B8 47F0 CB86             01ECE  2835=         B     CP45A                  +04 ERROR                            00293001
                                    2836=*                                                                          00294001
0016BC 9180 D080       00080        2837=CP45B    TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?                  00295001
0016C0 4710 CB86             01ECE  2838=         BO    CP45A                  YES, BRANCH                          00296001
0016C4 4540 578A             007D2  2839=         BAL   R4,OPDREC                                                   00297001
0016C8 91F0 900B       0000B        2840=         TM    11(R9),X'F0'                                                00298001
0016CC 4780 CB86             01ECE  2841=         BZ    CP45A                                                       00299001
0016D0 9102 9001       00001        2842=         TM    1(R9),X'02'                                                 00300001
0016D4 4710 C474             017BC  2843=         BO    CP45C                                                       00301001
0016D8 4540 CC28             01F70  2844=         BAL   R4,CP45D                                                    00302001
0016DC 4520 55A2             005EA  2845=         BAL   R2,GENTXT4             GENERATE 4 BYTES                     00303001
0016E0 58E0 0000             00000  2846=         L     R14,0                  *** GENERATED CODE ***               00304001
0016E4 92EE C3A5       016ED        2847=         MVI   CP45F+1,X'EE'                                               00305001
0016E8 4520 559E             005E6  2848=         BAL   R2,GENTXT2             GENERATE 2 BYTES                     00306001
0016EC 12E0                         2849=CP45F    LTR   R14,R0                 *** GENERATED CODE ***               00307001
0016EE D201 C4F0 9014 01838 00014   2850=CP45G    MVC   CP45H+2(2),20(R9)                                           00308001
0016F4 91F0 900B       0000B        2851=         TM    11(R9),X'F0'                                                00309001
0016F8 4740 C48E             017D6  2852=         BM    CP45K                                                       00310001
0016FC 4199 0005             00005  2853=         LA    R9,5(R9)                                                    00311001
001700 4540 CBA8             01EF0  2854=         BAL   R4,CP40H                                                    00312001
001704 4B90 5170             001B8  2855=         SH    R9,KH5                                                      00313001
001708 D201 C4F4 900E 0183C 0000E   2856=         MVC   CP45I+2(2),14(R9)                                           00314001
00170E D201 C4F8 9010 01840 00010   2857=         MVC   CP45J+2(2),16(R9)                                           00315001
001714 96A0 C4F8       01840        2858=         OI    CP45J+2,X'A0'                                               00316001
001718 4120 C4E0             01828  2859=         LA    R2,CP45L                                                    00317001
00171C 45E0 5588             005D0  2860=         BAL   R14,GENTXTS            GENERATE 28 BYTES                    00318001
001720 001C                         2861=         DC    H'28'                                                       00319001
                                    2862=*                                                                          00320001
001722 9102 9001       00001        2863=CP45M    TM    1(R9),X'02'                                                 00321001
001726 4710 C3F2             0173A  2864=         BO    CP45N                                                       00322001
00172A 9102 9006       00006        2865=         TM    6(R9),X'02'                                                 00323001
00172E 4780 C44E             01796  2866=         BZ    CP45P                                                       00324001
001732 4520 55A2             005EA  2867=         BAL   R2,GENTXT4             GENERATE 4 BYTES                     00325001
001736 458D 0120             00120  2868=         BAL   R8,288(R13,0)          *** GENERATED CODE ***               00326001
00173A 9102 9006       00006        2869=CP45N    TM    6(R9),X'02'                                                 00327001
00173E 4780 C446             0178E  2870=         BZ    CP45Q                                                       00328001
001742 91F0 900B       0000B        2871=         TM    11(R9),X'F0'                                                00329001
001746 4740 C4BC             01804  2872=         BM    CP45R                                                       00330001
00174A 4540 CBEC             01F34  2873=CP45S    BAL   R4,CP45T                                                    00331001
00174E 4520 5594             005DC  2874=         BAL   R2,GENTXTP4            GENERATE 4 BYTES                     00332001
001752 6A00 0000             00000  2875=CP45U    AD    R0,0                   *** GENERATED CODE ***               00333001
001756 D201 C41A C40C 01762 01754   2876=         MVC   CP45V+2(2),CP45U+2                                          00334001
00175C 4520 5594             005DC  2877=         BAL   R2,GENTXTP4            GENERATE 4 BYTES                     00335001
001760 6000 0000             00000  2878=CP45V    STD   R0,0                   *** GENERATED CODE ***               00336001
001764 91F0 900B       0000B        2879=CP45W    TM    11(R9),X'F0'                                                00337001
001768 4740 C56A             018B2  2880=         BM    CP45X                                                       00338001
00176C D201 C430 9010 01778 00010   2881=         MVC   CP45XA+2(2),16(R9)     UPDATE GENERATED CODE                00339001
001772 4520 55A6             005EE  2882=         BAL   R2,GENTXT6             GENERATE 6 BYTES                     00340001
001776 58FA 0000             00000  2883=CP45XA   L     R15,0(R10)             *** GENERATED CODE ***               00341001
00177A 07FF                         2884=         BR    R15                                                         00342001
                                    2885=*                                                                          00343001
00177C D201 D5F8 900E 005F8 0000E   2886=         MVC   WORKPL(2),14(R9)                                            00344001
001782 4540 CB9A             01EE2  2887=         BAL   R4,CP45XB                                                   00345001
001786 92FF DA61       00A61        2888=         MVI   GPBN+1,X'FF'                                                00346001
00178A 47F0 CB86             01ECE  2889=         B     CP45A                                                       00347001
                                    2890=*                                                                          00348001
00178E 4520 55A2             005EA  2891=CP45Q    BAL   R2,GENTXT4             GENERATE 4 BYTES                     00349001
001792 458D 014C             0014C  2892=         BAL   R8,332(R13,0)          *** GENERATED CODE ***               00350001
001796 91F0 900B       0000B        2893=CP45P    TM    11(R9),X'F0'                                                00351001
00179A 4740 C4CE             01816  2894=         BM    CP45XC                                                      00352001
00179E 4540 CBEC             01F34  2895=CP45XD   BAL   R4,CP45T                                                    00353001
0017A2 4520 55A2             005EA  2896=         BAL   R2,GENTXT4             GENERATE 4 BYTES                     00354001
0017A6 5AE0 0000             00000  2897=CP45XF   A     R14,0                  *** GENERATED CODE ***               00355001
0017AA D201 C46E C460 017B6 017A8   2898=         MVC   CP45XG+2(2),CP45XF+2                                        00356001
0017B0 4520 55A2             005EA  2899=         BAL   R2,GENTXT4             GENERATE 4 BYTES                     00357001
0017B4 50E0 0000             00000  2900=CP45XG   ST    R14,0                  *** GENERATED CODE ***               00358001
0017B8 47F0 C41C             01764  2901=         B     CP45W                                                       00359001
                                    2902=*                                                                          00360001
0017BC 4540 CC28             01F70  2903=CP45C    BAL   R4,CP45D                                                    00361001
0017C0 4520 5594             005DC  2904=         BAL   R2,GENTXTP4            GENERATE 4 BYTES                     00362001
0017C4 6800 0000             00000  2905=         LD    R0,0                   *** GENERATED CODE ***               00363001
0017C8 9200 C489       017D1        2906=         MVI   CP45XH+1,0                                                  00364001
0017CC 4520 5598             005E0  2907=         BAL   R2,GENTXTP2            GENERATE 2 BYTES                     00365001
0017D0 2200                         2908=CP45XH   LTDR  R0,R0                  *** GENERATED CODE ***               00366001
0017D2 47F0 C3A6             016EE  2909=         B     CP45G                                                       00367001
                                    2910=*                                                                          00368001
0017D6 9120 900B       0000B        2911=CP45K    TM    11(R9),X'20'                                                00369001
0017DA 4710 C4AE             017F6  2912=         BO    CP45XI                                                      00370001
0017DE 4520 55A6             005EE  2913=         BAL   R2,GENTXT6             GENERATE 6 BYTES                     00371001
0017E2 478D 0210             00210  2914=         BZ    528(R13)               *** GENERATED CODE ***               00372001
0017E6 05F0                         2915=         BALR  R15,R0                 *** GENERATED CODE ***               00373001
0017E8 4120 C4EA             01832  2916=         LA    R2,CP45XJ                                                   00374001
0017EC 45E0 5588             005D0  2917=         BAL   R14,GENTXTS            GENERATE 8 BYTES                     00375001
0017F0 0008                         2918=         DC    H'8'                                                        00376001
                                    2919=*                                                                          00377001
0017F2 47F0 C3DA             01722  2920=         B     CP45M                                                       00378001
                                    2921=*                                                                          00379001
0017F6 4120 C4E0             01828  2922=CP45XI   LA    R2,CP45L                                                    00380001
0017FA 45E0 5588             005D0  2923=         BAL   R14,GENTXTS            GENERATE 18 BYTES                    00381001
0017FE 0012                         2924=         DC    H'18'                                                       00382001
                                    2925=*                                                                          00383001
001800 47F0 C3DA             01722  2926=         B     CP45M                                                       00384001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

                                    2927=*                                                                       00385001
001804 D201 C4C8 9012 01810 00012  2928=CP45R       MVC    CP45XK+2(2),18(R9)                                   00386001
00180A 4520 5594             005DC  2929=            BAL    R2,GENTXTP4          GENERATE 4 BYTES                00387001
00180E 600A 0000             00000  2930=CP45XK      STD    R0,0(R10)            *** GENERATED CODE ***          00388001
001812 47F0 CB86             01ECE  2931=            B      CP45A                                               00389001
                                    2932=*                                                                       00390001
001816 D201 C4DA 9012 01822 00012  2933=CP45XC      MVC    CP45XL+2(2),18(R9)                                   00391001
00181C 4520 55A2             005EA  2934=            BAL    R2,GENTXT4           GENERATE 4 BYTES                00392001
001820 50EA 0000             00000  2935=CP45XL      ST     R14,0(R10)           *** GENERATED CODE ***          00393001
001824 47F0 CB86             01ECE  2936=            B      CP45A                                               00394001
                                    2937=*                                                                       00395001
001828 05F0                         2938=CP45L       BALR   R15,R0               *** GENERATED CODE ***          00396001
00182A 477F 0008             00008  2939=            BNZ    8(R15)               *** GENERATED CODE ***          00397001
00182E 1BFF                         2940=            SR     R15,R15              *** GENERATED CODE ***          00398001
001830 06F0                         2941=            BCTR   R15,R0               *** GENERATED CODE ***          00399001
001832 89F0 0001             00001  2942=CP45XJ      SLL    R15,1                *** GENERATED CODE ***          00400001
001836 50FA 0000             00000  2943=CP45H       ST     R15,0(R10)           *** GENERATED CODE ***          00401001
00183A 58FC 0000             00000  2944=CP45I       L      R15,0(R12)           *** GENERATED CODE ***          00402001
00183E 9780 A000       00000        2945=CP45J       XI     0(R10),X'80'         *** GENERATED CODE ***          00403001
001842 074F                         2946=            BMR    R15                  *** GENERATED CODE ***          00404001
                                    2947=*                                                                       00405001
                                    2948=*********************************************************************** 00406001
                                    2949=*                                                                       00407001
                                    2950=*         COMPILER PROGRAM - CP47                                       00408001
                                    2951=*                                                                       00409001
                                    2952=*********************************************************************** 00410001
                                    2953=*                                                                       00411001
001844 58C0 51BC             00204  2954=CP47        L      R12,SCPTAB+4*6       R12 -> CP6                      00412001
001848 4140 CB5C             01EA4  2955=            LA     R4,CP47A                                            00413001
00184C 4530 5F08             00F50  2956=            BAL    R3,OPDTEST                                          00414001
001850 4540 5E44             00E8C  2957=            BAL    R4,TARITHM                                          00415001
001854 47F0 C514             0185C  2958=            B      CP47B                +00                            00416001
001858 47F0 CB5C             01EA4  2959=            B      CP47A                +04 ERROR                      00417001
                                    2960=*                                                                       00418001
00185C 9180 D080       00080        2961=CP47B       TM     COMPFLGS,COMPMODE    SYNTAX CHECK MODE ?             00419001
001860 4710 CB5C             01EA4  2962=            BO     CP47A                YES, BRANCH                    00420001
001864 91F0 9010       00010        2963=            TM     16(R9),X'F0'                                        00421001
001868 4780 C752             01A9A  2964=            BZ     CP47C                                               00422001
00186C 4540 578A             007D2  2965=            BAL    R4,OPDREC                                           00423001
001870 951C 8000       00000        2966=            CLI    0(R8),X'1C'                                         00424001
001874 4770 C54A             01892  2967=            BNE    CP47D                                               00425001
001878 9102 9010       00010        2968=            TM     16(R9),X'02'                                        00426001
00187C 4710 C54A             01892  2969=            BO     CP47D                                               00427001
001880 D201 C548 9019 01890 00019  2970=            MVC    CP47E+2(2),25(R9)    UPDATE GENERATED CODE           00428001
001886 96A0 C548       01890        2971=            OI     CP47E+2,X'A0'                                       00429001
00188A 4520 55A2             005EA  2972=            BAL    R2,GENTXT4           GENERATE 4 BYTES                00430001
00188E 97E0 A000       00000        2973=CP47E       XI     0(R10),X'E0'         *** GENERATED CODE ***          00431001
001892 91F0 9010       00010        2974=CP47D       TM     16(R9),X'F0'                                        00432001
001896 4740 C608             01950  2975=            BM     CP47F                                               00433001
00189A 4199 0005             00005  2976=            LA     R9,5(R9)                                            00434001
00189E 9102 9006       00006        2977=            TM     6(R9),X'02'                                         00435001
0018A2 4710 C5D2             0191A  2978=            BO     CP47G                                               00436001
0018A6 4540 CBEC             01F34  2979=            BAL    R4,CP45T                                            00437001
0018AA 4520 55A2             005EA  2980=            BAL    R2,GENTXT4           GENERATE 4 BYTES                00438001
0018AE 58E0 0000             00000  2981=            L      R14,0                *** GENERATED CODE ***          00439001
0018B2 4B90 5170             001B8  2982=CP45X       SH     R9,KH5                                              00440001
0018B6 9102 9001       00001        2983=            TM     1(R9),X'02'                                         00441001
0018BA 4710 C5A2             018EA  2984=            BO     CP47GA                                              00442001
0018BE 4540 CC28             01F70  2985=            BAL    R4,CP45D                                            00443001
0018C2 4520 55A2             005EA  2986=            BAL    R2,GENTXT4           GENERATE 4 BYTES                00444001
0018C6 59E0 0000             00000  2987=            C      R14,0                *** GENERATED CODE ***          00445001
0018CA 47F0 C58C             018D4  2988=            B      CP47H                                               00446001
                                    2989=*                                                                       00447001
0018CE 4520 559E             005E6  2990=            BAL    R2,GENTXT2           GENERATE 2 BYTES                00448001
0018D2 19E0                         2991=            CR     R14,R0               *** GENERATED CODE ***          00449001
0018D4 D201 C598 9019 018E0 00019  2992=CP47H       MVC    CP47I+2(2),25(R9)                                    00450001
0018DA 4520 55A2             005EA  2993=            BAL    R2,GENTXT4           GENERATE 4 BYTES                00451001
0018DE 438A 0000             00000  2994=CP47I       IC     R8,0(R10)            *** GENERATED CODE ***          00452001
0018E2 4199 0005             00005  2995=            LA     R9,5(R9)                                            00453001
0018E6 47F0 C8D8             01C20  2996=            B      CP47J                                               00454001
                                    2997=*                                                                       00455001
0018EA 9140 9000       00000        2998=CP47GA      TM     0(R9),X'40'                                         00456001
0018EE 4710 C724             01A6C  2999=            BO     CP47K                                               00457001
0018F2 4540 CC28             01F70  3000=            BAL    R4,CP45D                                            00458001
0018F6 4520 5594             005DC  3001=            BAL    R2,GENTXTP4          GENERATE 4 BYTES                00459001
0018FA 6820 0000             00000  3002=            LD     R2,0                 *** GENERATED CODE ***          00460001
0018FE 47F0 C5C0             01908  3003=            B      CP47L                                               00461001
                                    3004=*                                                                       00462001
001902 4520 5598             005E0  3005=            BAL    R2,GENTXTP2          GENERATE 2 BYTES                00463001
001906 2820                         3006=            LDR    R2,R0                *** GENERATED CODE ***          00464001
001908 4520 55A2             005EA  3007=CP47L       BAL    R2,GENTXT4           GENERATE 4 BYTES                00465001
00190C 458D 0120             00120  3008=            BAL    R8,288(R13)          *** GENERATED CODE ***          00466001
001910 4520 5598             005E0  3009=            BAL    R2,GENTXTP2          GENERATE 2 BYTES                00467001
001914 2902                         3010=            CDR    R0,R2                *** GENERATED CODE ***          00468001
001916 47F0 C58C             018D4  3011=            B      CP47H                                               00469001
                                    3012=*                                                                       00470001
00191A 4540 CBEC             01F34  3013=CP47G       BAL    R4,CP45T                                            00471001
00191E 4520 5594             005DC  3014=            BAL    R2,GENTXTP4          GENERATE 4 BYTES                00472001
001922 6860 0000             00000  3015=            LD     R6,0                 *** GENERATED CODE ***          00473001
001926 4B90 5170             001B8  3016=            SH     R9,KH5                                              00474001
00192A 9102 9001       00001        3017=            TM     1(R9),X'02'                                         00475001
00192E 4710 C5EE             01936  3018=            BO     CP47M                                               00476001
001932 4540 545E             004A6  3019=            BAL    R4,TRINRE                                           00477001
001936 4540 CC28             01F70  3020=CP47M       BAL    R4,CP45D                                            00478001
00193A 4520 5594             005DC  3021=            BAL    R2,GENTXTP4          GENERATE 4 BYTES                00479001
00193E 6960 0000             00000  3022=            CD     R6,0                 *** GENERATED CODE ***          00480001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

001942 47F0 C58C              018D4  3023=          B     CP47H                                                    00481001
                                     3024=*                                                                        00482001
001946 4520 5598              005E0  3025=          BAL   R2,GENTXTP2              GENERATE 4 BYTES                00483001
00194A 2960                          3026=          CDR   R6,R0                    *** GENERATED CODE ***          00484001
00194C 47F0 C58C              018D4  3027=          B     CP47H                                                    00485001
                                     3028=*                                                                        00486001
001950 D201 C658 9019 019A0 00019    3029=CP47F     MVC   CP47N+2(2),25(R9)                                        00487001
001956 4810 DA56              00A56  3030=          LH    R1,ONEENTRY                                              00488001
00195A 4A10 C658              019A0  3031=          AH    R1,CP47N+2                                               00489001
00195E 4010 C658              019A0  3032=          STH   R1,CP47N+2                                               00490001
001962 9102 9001        00001        3033=          TM    1(R9),X'02'                                              00491001
001966 4710 C62E              01976  3034=          BO    CP47P                                                    00492001
00196A 9102 900B        0000B        3035=          TM    11(R9),X'02'                                             00493001
00196E 4780 C62E              01976  3036=          BZ    CP47P                                                    00494001
001972 4540 545E              004A6  3037=          BAL   R4,TRINRE                                                00495001
001976 4540 CC28              01F70  3038=CP47P     BAL   R4,CP45D                                                 00496001
00197A 47F0 C6FC              01A44  3039=          B     CP47Q                                                    00497001
                                     3040=*                                                                        00498001
00197E 0000                          3041=          DC    X'0000'                                                  00499001
001980 0000                          3042=CP47R     DC    X'0000'                                                  00500001
001982 4700 0000              00000  3043=          NOP   0                                                        00501001
001986 47F0 C644              0198C  3044=          B     CP47S                                                    00502001
                                     3045=*                                                                        00503001
00198A 0000                          3046=          DC    X'0000'                                                  00504001
                                     3047=*                                                                        00505001
00198C 9102 9001        00001        3048=CP47S     TM    1(R9),X'02'                                              00506001
001990 D300 C657 9003 0199F 00003    3049=          MVZ   CP47N+1(1),3(R9)                                         00507001
001996 4710 C6EA              01A32  3050=          BO    CP47T                                                    00508001
00199A 4520 55A2              005EA  3051=          BAL   R2,GENTXT4               GENERATE 4 BYTES                00509001
00199E 500A 0000              00000  3052=CP47N     ST    R0,0(R10)                *** GENERATED CODE ***          00510001
0019A2 92C0 9000        00000        3053=CP47U     MVI   0(R9),X'C0'                                              00511001
0019A6 D201 9003 C658 00003 019A0    3054=          MVC   3(2,R9),CP47N+2                                          00512001
0019AC D200 9002 DA5D 00002 00A5D    3055=          MVC   2(1,R9),SPBNST+1                                         00513001
0019B2 92FF DA61        00A61        3056=          MVI   GPBN+1,X'FF'                                             00514001
0019B6 4199 0005              00005  3057=          LA    R9,5(R9)                                                 00515001
0019BA 9102 9006        00006        3058=          TM    6(R9),X'02'                                              00516001
0019BE 4710 C6DA              01A22  3059=          BO    CP47V                                                    00517001
0019C2 4540 CBEC              01F34  3060=          BAL   R4,CP45T                                                 00518001
0019C6 4520 55A2              005EA  3061=          BAL   R2,GENTXT4               GENERATE 4 BYTES                00519001
0019CA 58E0 0000              00000  3062=          L     R14,0                    *** GENERATED CODE ***          00520001
0019CE 4110 000C              0000C  3063=CP47W     LA    R1,12                                                    00521001
0019D2 91FF DA61        00A61        3064=          TM    GPBN+1,X'FF'                                             00522001
0019D6 4710 C69A              019E2  3065=          BO    CP47Y                                                    00523001
0019DA 4111 0004              00004  3066=          LA    R1,4(R1)                                                 00524001
0019DE 92FF DA61        00A61        3067=          MVI   GPBN+1,X'FF'                                             00525001
0019E2 4120 C744              01A8C  3068=CP47Y     LA    R2,CP47ZB                                                00526001
0019E6 4010 C750              01A98  3069=          STH   R1,CP47ZA+2                                              00527001
0019EA D201 C74C 9010 01A94 00010    3070=          MVC   CP47ZC+2(2),16(R9)                                       00528001
0019F0 45E0 5588              005D0  3071=          BAL   R14,GENTXTS              GENERATE 14 BYTES               00529001
0019F4 000E                          3072=          DC    H'14'                                                    00530001
                                     3073=*                                                                        00531001
0019F6 9102 9006        00006        3074=          TM    6(R9),X'02'                                              00532001
0019FA 4710 C6C8              01A10  3075=          BO    CP47ZD                                                   00533001
0019FE D201 C6C2 9012 01A0A 00012    3076=          MVC   CP47ZE+2(2),18(R9)                                       00534001
001A04 4520 55A2              005EA  3077=          BAL   R2,GENTXT4               GENERATE 4 BYTES                00535001
001A08 58EA 0000              00000  3078=CP47ZE    L     R14,0(R10)               *** GENERATED CODE ***          00536001
001A0C 47F0 C456              0179E  3079=          B     CP45XD                                                   00537001
                                     3080=*                                                                        00538001
001A10 D201 C6D4 9012 01A1C 00012    3081=CP47ZD    MVC   CP47ZF+2(2),18(R9)                                       00539001
001A16 4520 5594              005DC  3082=CP47ZG    BAL   R2,GENTXTP4              GENERATE 4 BYTES                00540001
001A1A 680A 0000              00000  3083=CP47ZF    LD    R0,0(R10)                *** GENERATED CODE ***          00541001
001A1E 47F0 C402              0174A  3084=          B     CP45S                                                    00542001
                                     3085=*                                                                        00543001
001A22 4540 CBEC              01F34  3086=CP47V     BAL   R4,CP45T                                                 00544001
001A26 4520 5594              005DC  3087=          BAL   R2,GENTXTP4              GENERATE 4 BYTES                00545001
001A2A 6800 0000              00000  3088=          LD    R0,0                     *** GENERATED CODE ***          00546001
001A2E 47F0 C686              019CE  3089=          B     CP47W                                                    00547001
                                     3090=*                                                                        00548001
001A32 D202 C6F5 C657 01A3D 0199F    3091=CP47T     MVC   CP47ZH+1(3),CP47N+1                                      00549001
001A38 4520 5594              005DC  3092=          BAL   R2,GENTXTP4              GENERATE 4 BYTES                00550001
001A3C 600A 0000              00000  3093=CP47ZH    STD   R0,0(R10)                *** GENERATED CODE ***          00551001
001A40 47F0 C65A              019A2  3094=          B     CP47U                                                    00552001
                                     3095=*                                                                        00553001
001A44 4810 DA56              00A56  3096=CP47Q     LH    R1,ONEENTRY                                              00554001
001A48 0610                          3097=          BCTR  R1,R0                                                    00555001
001A4A 4210 C71B              01A63  3098=          STC   R1,CP47ZI+1                                              00556001
001A4E D201 C71E C638 01A66 01980    3099=          MVC   CP47ZI+4(2),CP47R                                        00557001
001A54 D201 C71C C658 01A64 019A0    3100=          MVC   CP47ZI+2(2),CP47N+2                                      00558001
001A5A 96A0 C71C        01A64        3101=          OI    CP47ZI+2,X'A0'                                           00559001
001A5E 4520 55A6              005EE  3102=          BAL   R2,GENTXT6               GENERATE 6 BYTES                00560001
001A62 D200 A000 0000 00000 00000    3103=CP47ZI    MVC   0(1,R10),0               *** GENERATED CODE ***          00561001
001A68 47F0 C65A              019A2  3104=          B     CP47U                                                    00562001
                                     3105=*                                                                        00563001
001A6C 9102 900B        0000B        3106=CP47K     TM    11(R9),X'02'                                             00564001
001A70 4710 C734              01A7C  3107=          BO    CP47ZJ                                                   00565001
001A74 4520 55A2              005EA  3108=          BAL   R2,GENTXT4               GENERATE 4 BYTES                00566001
001A78 458D 0120              00120  3109=          BAL   R8,288(R13)              *** GENERATED CODE ***          00567001
001A7C 4540 CC28              01F70  3110=CP47ZJ    BAL   R4,CP45D                                                 00568001
001A80 4520 5594              005DC  3111=          BAL   R2,GENTXTP4              GENERATE 4 BYTES                00569001
001A84 6900 0000              00000  3112=          CD    R0,0                     *** GENERATED CODE ***          00570001
001A88 47F0 C58C              018D4  3113=          B     CP47H                                                    00571001
                                     3114=*                                                                        00572001
001A8C 05F0                          3115=CP47ZB    BALR  R15,R0                   *** GENERATED CODE ***          00573001
001A8E 41FF 000C              0000C  3116=          LA    R15,12(R15)              *** GENERATED CODE ***          00574001
001A92 50FA 0000              00000  3117=CP47ZC    ST    R15,0(R10)               *** GENERATED CODE ***          00575001
001A96 47FF 0000              00000  3118=CP47ZA    B     0(R15)                   *** GENERATED CODE ***          00576001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

                                   3119=*                                                                          00577001
001A9A 4199 0005            00005  3120=CP47C     LA    R9,5(R9)                                                   00578001
001A9E 9270 C767      01AAF        3121=          MVI   CP47ZK+1,X'70'                                             00579001
001AA2 92E7 C773      01ABB        3122=          MVI   CP47ZL+1,X'E7'                                             00580001
001AA6 4540 CC28            01F70  3123=          BAL   R4,CP45D                                                   00581001
001AAA 4520 55A2            005EA  3124=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00582001
001AAE 5800 0000            00000  3125=CP47ZK    L     R0,0                      *** GENERATED CODE ***           00583001
001AB2 47F0 C76E            01AB6  3126=          B     CP47ZM                                                     00584001
                                   3127=*                                                                          00585001
001AB6 4520 559E            005E6  3128=CP47ZM    BAL   R2,GENTXT2                GENERATE 2 BYTES                 00586001
001ABA 12E0                        3129=CP47ZL    LTR   R14,R0                    *** GENERATED CODE ***           00587001
001ABC 9104 D082      00082        3130=          TM    COMPFLGS+2,NOTEST                                          00588001
001AC0 4710 C784            01ACC  3131=          BO    CP47ZN                                                     00589001
001AC4 4520 55A2            005EA  3132=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00590001
001AC8 478D 0210            00210  3133=          BZ    528(R13)                  *** GENERATED CODE ***           00591001
001ACC 9102 900B      0000B        3134=CP47ZN    TM    11(R9),X'02'                                               00592001
001AD0 4780 C79A            01AE2  3135=          BZ    CP47ZP                                                     00593001
001AD4 D201 C798 9012 01AE0 00012  3136=          MVC   CP47ZQ+2(2),18(R9)                                         00594001
001ADA 4520 55A2            005EA  3137=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00595001
001ADE 50EA 0000            00000  3138=CP47ZQ    ST    R14,0(R10)                *** GENERATED CODE ***           00596001
001AE2 4B90 5170            001B8  3139=CP47ZP    SH    R9,KH5                                                     00597001
001AE6 4540 CC28            01F70  3140=          BAL   R4,CP45D                                                   00598001
001AEA 4520 55A2            005EA  3141=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00599001
001AEE 5AE0 0000            00000  3142=          A     R14,0                     *** GENERATED CODE ***           00600001
001AF2 47F0 C7B4            01AFC  3143=          B     CP47ZR                                                     00601001
                                   3144=*                                                                          00602001
001AF6 4520 559E            005E6  3145=          BAL   R2,GENTXT2                GENERATE 2 BYTES                 00603001
001AFA 1AE0                        3146=          AR    R14,R0                    *** GENERATED CODE ***           00604001
001AFC 4199 000A            0000A  3147=CP47ZR    LA    R9,10(R9)                                                  00605001
001B00 4540 CC28            01F70  3148=          BAL   R4,CP45D                                                   00606001
001B04 4520 55A2            005EA  3149=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00607001
001B08 5BE0 0000            00000  3150=          S     R14,0                     *** GENERATED CODE ***           00608001
001B0C 47F0 C7CE            01B16  3151=          B     CP47ZS                                                     00609001
                                   3152=*                                                                          00610001
001B10 4520 559E            005E6  3153=          BAL   R2,GENTXT2                GENERATE 2 BYTES                 00611001
001B14 1BE0                        3154=          SR    R14,R0                    *** GENERATED CODE ***           00612001
001B16 D200 C7DD C773 01B25 01ABB  3155=CP47ZS    MVC   CP47ZT+1(1),CP47ZL+1                                       00613001
001B1C 4520 55A6            005EE  3156=          BAL   R2,GENTXT6                GENERATE 6 BYTES                 00614001
001B20 8EE0 0020            00020  3157=          SRDA  R14,32                    *** GENERATED CODE ***           00615001
001B24 1DE0                        3158=CP47ZT    DR    R14,R0                    *** GENERATED CODE ***           00616001
001B26 4520 559E            005E6  3159=          BAL   R2,GENTXT2                GENERATE 2 BYTES                 00617001
001B2A 180F                        3160=          LR    R0,R15                    *** GENERATED CODE ***           00618001
001B2C 951C 8000      00000        3161=          CLI   0(R8),X'1C'                                                00619001
001B30 4780 C804            01B4C  3162=          BE    CP43X                                                      00620001
001B34 9601 9006      00006        3163=          OI    6(R9),X'01'                                                00621001
001B38 D201 C7FC 9007 01B44 00007  3164=          MVC   CP47ZU+2(2),7(R9)                                          00622001
001B3E 4520 55A6            005EE  3165=          BAL   R2,GENTXT6                GENERATE 6 BYTES                 00623001
001B42 58FC 0000            00000  3166=CP47ZU    L     R15,0(R12)                *** GENERATED CODE ***           00624001
001B46 05FF                        3167=          BALR  R15,R15                   *** GENERATED CODE ***           00625001
001B48 47F0 CB64            01EAC  3168=          B     CP47ZW                                                     00626001
                                   3169=*                                                                          00627001
001B4C 4540 CBBC            01F04  3170=CP43X     BAL   R4,CP43Y                                                   00628001
001B50 4010 C812            01B5A  3171=          STH   R1,CP47ZV+2                                                00629001
001B54 4520 55A2            005EA  3172=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00630001
001B58 58FC 0000            00000  3173=CP47ZV    L     R15,0(R12)                *** GENERATED CODE ***           00631001
001B5C D201 D5F8 9007 005F8 00007  3174=          MVC   WORKPL(2),7(R9)                                            00632001
001B62 4540 CB9A            01EE2  3175=          BAL   R4,CP45XB                                                  00633001
001B66 D201 C82A 900B 01B72 0000B  3176=          MVC   CP47YA+2(2),11(R9)                                         00634001
001B6C 4520 55A2            005EA  3177=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00635001
001B70 50FA 0000            00000  3178=CP47YA    ST    R15,0(R10)                *** GENERATED CODE ***           00636001
001B74 9108 9006      00006        3179=          TM    6(R9),X'08'                                                00637001
001B78 4780 CB64            01EAC  3180=          BZ    CP47ZW                                                     00638001
001B7C 4540 5AB0            00AF8  3181=          BAL   R4,ROUTINE7                                                00639001
001B80 4070 DA5E            00A5E  3182=          STH   R7,SPBNST+2                                                00640001
001B84 D202 9011 DA5D 00011 00A5D  3183=          MVC   17(3,R9),SPBNST+1                                          00641001
001B8A D201 900F CB52 0000F 01E9A  3184=          MVC   15(2,R9),CP47YB                                            00642001
001B90 4520 55A2            005EA  3185=          BAL   R2,GENTXT4                GENERATE 4 BYTES                 00643001
001B94 1200                        3186=          LTR   R0,R0                     *** GENERATED CODE ***           00644001
001B96 07DF                        3187=          BNPR  R15                       *** GENERATED CODE ***           00645001
001B98 9102 9006      00006        3188=          TM    6(R9),X'02'                                                00646001
001B9C 9210 CCCC      02014        3189=          MVI   CP47YC,X'10'                                               00647001
001BA0 4710 CC52            01F9A  3190=          BO    CP47YD                                                     00648001
001BA4 4540 CBA8            01EF0  3191=CP47YE    BAL   R4,CP40H                                                   00649001
001BA8 4540 CB94            01EDC  3192=          BAL   R4,CP47YF                                                  00650001
001BAC 4119 000F            0000F  3193=CP47YG    LA    R1,15(R9)                                                  00651001
001BB0 5010 D5C0            005C0  3194=          ST    R1,RUTI                                                    00652001
001BB4 47F0 CB64            01EAC  3195=          B     CP47ZW                                                     00653001
                                   3196=*                                                                          00654001
001BB8 4540 CBA8            01EF0  3197=CP47YH    BAL   R4,CP40H                                                   00655001
001BBC 4010 C87E            01BC6  3198=          STH   R1,CP47YI+2               UPDATE GENERATED CODE            00656001
001BC0 4520 55A6            005EE  3199=          BAL   R2,GENTXT6                GENERATE 6 BYTES                 00657001
001BC4 58FC 0000            00000  3200=CP47YI    L     R15,0(R12)                *** GENERATED CODE ***           00658001
001BC8 07FF                        3201=          BR    R15                       *** GENERATED CODE ***           00659001
                                   3202=*                                                                          00660001
001BCA 4540 CBA8            01EF0  3203=          BAL   R4,CP40H                                                   00661001
001BCE 4540 CB94            01EDC  3204=          BAL   R4,CP47YF                                                  00662001
001BD2 47F0 CF3A            02282  3205=          B     CP47YJ                                                     00663001
                                   3206=*                                                                          00664001
001BD6 5810 D61C            0061C  3207=CP47YK    L     R1,LATAB                                                   00665001
001BDA 4A10 C87E            01BC6  3208=          AH    R1,CP47YI+2                                                00666001
001BDE 5061 0000            00000  3209=          ST    R6,0(R1)                                                   00667001
001BE2 47F0 C864            01BAC  3210=          B     CP47YG                                                     00668001
                                   3211=*                                                                          00669001
                                   3212=*********************************************************************** 00670001
                                   3213=*                                                                          00671001
                                   3214=*         COMPILER PROGRAM - CP49                                          00672001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   3215=*                                                                        00673001
                                   3216=*********************************************************************** 00674001
                                   3217=*                                                                        00675001
001BE6 58C0 51BC            00204  3218=CP49       L     R12,SCPTAB+4*6        R12 -> CP6                       00676001
001BEA 4140 CB60            01EA8  3219=           LA    R4,CP49A                                               00677001
001BEE 4530 5F08            00F50  3220=           BAL   R3,OPDTEST                                             00678001
001BF2 4540 5E9A            00EE2  3221=           BAL   R4,ARRTEST1                                            00679001
001BF6 9103 9001      00001        3222=           TM    1(R9),X'03'                                            00680001
001BFA 4710 C8C0            01C08  3223=           BO    CP49B                                                  00681001
001BFE 4540 5310            00358  3224=           BAL   R4,SERR2                                               00682001
001C02 00B6                        3225=           DC    H'182'                ERROR 182                        00683001
                                   3226=*                                                                        00684001
001C04 47F0 CB60            01EA8  3227=           B     CP49A                                                  00685001
                                   3228=*                                                                        00686001
001C08 9180 D080      00080        3229=CP49B      TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?              00687001
001C0C 4710 CB60            01EA8  3230=           BO    CP49A                 YES, BRANCH                      00688001
001C10 4540 578A            007D2  3231=           BAL   R4,OPDREC                                              00689001
001C14 4540 CC28            01F70  3232=           BAL   R4,CP45D                                               00690001
001C18 4520 55A2            005EA  3233=           BAL   R2,GENTXT4            GENERATE 4 BYTES                 00691001
001C1C 9101 0000      00000        3234=           TM    0,X'01'               *** GENERATED CODE ***           00692001
001C20 4199 0005            00005  3235=CP47J      LA    R9,5(R9)                                               00693001
001C24 9102 9006      00006        3236=           TM    6(R9),X'02'                                            00694001
001C28 4780 C93A            01C82  3237=           BZ    CP49C                                                  00695001
001C2C D201 C8F0 9011 01C38 00011  3238=           MVC   CP49D+2(2),17(R9)                                      00696001
001C32 4520 55A2            005EA  3239=           BAL   R2,GENTXT4            GENERATE 4 BYTES                 00697001
001C36 58FA 0000            00000  3240=CP49D      L     R15,0(R10)            *** GENERATED CODE ***           00698001
001C3A 951B A000      00000        3241=           CLI   0(R10),X'1B'                                           00699001
001C3E 4780 C906            01C4E  3242=           BE    CP49E                                                  00700001
001C42 4520 55A2            005EA  3243=           BAL   R2,GENTXT4            GENERATE 4 BYTES                 00701001
001C46 448D 0112            00112  3244=           EX    R8,274(R13)           *** GENERATED CODE ***           00702001
001C4A 47F0 C90C            01C54  3245=           B     CP49F                                                  00703001
                                   3246=*                                                                        00704001
001C4E 4520 559E            005E6  3247=CP49E      BAL   R2,GENTXT2            GENERATE 2 BYTES                 00705001
001C52 071F                        3248=           BOR   R15                   *** GENERATED CODE ***           00706001
001C54 951C 8000      00000        3249=CP49F      CLI   0(R8),X'1C'                                            00707001
001C58 4770 C92A            01C72  3250=           BNE   CP49H                                                  00708001
001C5C 4540 CBBC            01F04  3251=           BAL   R4,CP43Y                                               00709001
001C60 4010 C922            01C6A  3252=           STH   R1,CP49G+2                                             00710001
001C64 4520 55A6            005EE  3253=           BAL   R2,GENTXT6            GENERATE 6 BYTES                 00711001
001C68 58FC 0000            00000  3254=CP49G      L     R15,0(R12)            *** GENERATED CODE ***           00712001
001C6C 07FF                        3255=           BR    R15                   *** GENERATED CODE ***           00713001
                                   3256=*                                                                        00714001
001C6E 47F0 C998            01CE0  3257=           B     CP49_X                                                 00715001
                                   3258=*                                                                        00716001
001C72 45E0 CBCC            01F14  3259=CP49H      BAL   R14,CP40X                                              00717001
001C76 5060 CFE8            02330  3260=CP49I      ST    R6,WA2_A+2                                             00718001
001C7A 9601 9006      00006        3261=           OI    6(R9),X'01'                                            00719001
001C7E 47F0 CB64            01EAC  3262=           B     CP47ZW                                                 00720001
                                   3263=*                                                                        00721001
001C82 951C 8000      00000        3264=CP49C      CLI   0(R8),X'1C'                                            00722001
001C86 4780 C96E            01CB6  3265=           BE    CP49J                                                  00723001
001C8A D201 C94E 9007 01C96 00007  3266=           MVC   CP49K+2(2),7(R9)                                       00724001
001C90 4520 55A2            005EA  3267=           BAL   R2,GENTXT4            GENERATE 4 BYTES                 00725001
001C94 58FC 0000            00000  3268=CP49K      L     R15,0(R12)            *** GENERATED CODE ***           00726001
001C98 951B A000      00000        3269=           CLI   0(R10),X'1B'                                           00727001
001C9C 4780 C964            01CAC  3270=           BE    CP49L                                                  00728001
001CA0 4520 55A2            005EA  3271=           BAL   R2,GENTXT4            GENERATE 4 BYTES                 00729001
001CA4 448D 0112            00112  3272=           EX    R8,274(R13)           *** GENERATED CODE ***           00730001
001CA8 47F0 C96A            01CB2  3273=           B     CP49M                                                  00731001
                                   3274=*                                                                        00732001
001CAC 4520 559E            005E6  3275=CP49L      BAL   R2,GENTXT2            GENERATE 2 BYTES                 00733001
001CB0 071F                        3276=           BOR   R15                   *** GENERATED CODE ***           00734001
001CB2 47F0 C92E            01C76  3277=CP49M      B     CP49I                                                  00735001
                                   3278=*                                                                        00736001
001CB6 4540 CBBC            01F04  3279=CP49J      BAL   R4,CP43Y                                               00737001
001CBA 4010 C97C            01CC4  3280=           STH   R1,CP49N+2                                             00738001
001CBE 4520 55A2            005EA  3281=           BAL   R2,GENTXT4            GENERATE 4 BYTES                 00739001
001CC2 58FC 0000            00000  3282=CP49N      L     R15,0(R12)            *** GENERATED CODE ***           00740001
001CC6 951B A000      00000        3283=           CLI   0(R10),X'1B'                                           00741001
001CCA 4780 C992            01CDA  3284=           BE    CP49P                                                  00742001
001CCE 4520 55A2            005EA  3285=           BAL   R2,GENTXT4            GENERATE 4 BYTES                 00743001
001CD2 448D 0112            00112  3286=           EX    R8,274(R13)           *** GENERATED CODE ***           00744001
001CD6 47F0 C998            01CE0  3287=           B     CP49_X                                                 00745001
                                   3288=*                                                                        00746001
001CDA 4520 559E            005E6  3289=CP49P      BAL   R2,GENTXT2            GENERATE 2 BYTES                 00747001
001CDE 078F                        3290=           BER   R15                   *** GENERATED CODE ***           00748001
001CE0 D201 D5F8 9007 005F8 00007  3291=CP49_X     MVC   WORKPL(2),7(R9)                                        00749001
001CE6 4540 CB9A            01EE2  3292=           BAL   R4,CP45XB                                              00750001
001CEA 9102 9006      00006        3293=           TM    6(R9),X'02'                                            00751001
001CEE 4780 CB64            01EAC  3294=           BZ    CP47ZW                                                 00752001
001CF2 9200 CCCC      02014        3295=           MVI   CP47YC,X'00'                                           00753001
001CF6 47F0 CC52            01F9A  3296=           B     CP47YD                                                 00754001
                                   3297=*                                                                        00755001
001CFA D201 C9F8 9011 01D40 00011  3298=CP49Q      MVC   CP49R+2(2),17(R9)                                      00756001
001D00 4120 C9F0            01D38  3299=           LA    R2,CP49S                                               00757001
001D04 9101 CFEC      02334        3300=           TM    WA2_B,X'01'                                            00758001
001D08 4710 C9D2            01D1A  3301=           BO    CP49T                                                  00759001
001D0C 9208 C9F5      01D3D        3302=           MVI   CP49U+3,X'08'         UPDATE GENERATED CODE            00760001
001D10 45E0 5588            005D0  3303=           BAL   R14,GENTXTS           GENERATE 10 BYTES                00761001
001D14 000A                        3304=           DC    H'10'                                                  00762001
                                   3305=*                                                                        00763001
001D16 47F0 CB64            01EAC  3306=           B     CP47ZW                                                 00764001
                                   3307=*                                                                        00765001
001D1A 4540 CBA8            01EF0  3308=CP49T      BAL   R4,CP40H                                               00766001
001D1E 4010 C9FC            01D44  3309=           STH   R1,CP49V+2                                             00767001
001D22 920E C9F5      01D3D        3310=           MVI   CP49U+3,X'0E'                                          00768001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

001D26 45E0 5588            005D0  3311=          BAL    R14,GENTXTS            GENERATE 16 BYTES               00769001
001D2A 0010                        3312=          DC     H'16'                                                  00770001
                                   3313=*                                                                       00771001
001D2C 47F0 CF3A            02282  3314=          B      CP47YJ                                                 00772001
                                   3315=*                                                                       00773001
001D30 4540 CB94            01EDC  3316=CP49W     BAL    R4,CP47YF                                              00774001
001D34 47F0 CB64            01EAC  3317=          B      CP47ZW                                                 00775001
                                   3318=*                                                                       00776001
001D38 05E0                        3319=CP49S     BALR   R14,R0                 *** GENERATED CODE ***          00777001
001D3A 41EE 0000            00000  3320=CP49U     LA     R14,0(R14)             *** GENERATED CODE ***          00778001
001D3E 50EA 0000            00000  3321=CP49R     ST     R14,0(R10)             *** GENERATED CODE ***          00779001
001D42 58FC 0000            00000  3322=CP49V     L      R15,0(R12)             *** GENERATED CODE ***          00780001
001D46 07FF                        3323=          BR     R15                    *** GENERATED CODE ***          00781001
                                   3324=*                                                                       00782001
                                   3325=*********************************************************************** 00783001
                                   3326=*                                                                       00784001
                                   3327=*         COMPILER PROGRAM - CP81                                       00785001
                                   3328=*                                                                       00786001
                                   3329=*********************************************************************** 00787001
                                   3330=*                                                                       00788001
001D48 58C0 51BC            00204  3331=CP81      L      R12,SCPTAB+4*6         R12 -> CP6                      00789001
001D4C 9101 D080      00080        3332=          TM     COMPFLGS,OPERAND                                       00790001
001D50 4710 CA34            01D7C  3333=          BO     CP81A                                                  00791001
001D54 9180 D080      00080        3334=CP81B     TM     COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?             00792001
001D58 4780 CA40            01D88  3335=          BZ     CP81C                  NO, BRANCH                      00793001
001D5C 06A0                        3336=CP81D     BCTR   R10,R0                                                 00794001
001D5E 1B11                        3337=          SR     R1,R1                                                  00795001
001D60 9102 9006      00006        3338=          TM     6(R9),X'02'                                            00796001
001D64 4780 CA2A            01D72  3339=          BZ     CP81E                                                  00797001
001D68 D201 D5F8 9017 005F8 00017  3340=          MVC    WORKPL(2),23(R9)                                       00798001
001D6E 4810 D5F8            005F8  3341=          LH     R1,WORKPL                                              00799001
001D72 4191 9014            00014  3342=CP81E     LA     R9,20(R1,R9)                                           00800001
001D76 92FF DA61      00A61        3343=          MVI    GPBN+1,X'FF'                                           00801001
001D7A 07F5                        3344=          BR     R5                     RETURN TO SUBSTART              00802001
                                   3345=*                                                                       00803001
001D7C 4540 5D54            00D9C  3346=CP81A     BAL    R4,PLPRST                                              00804001
001D80 4199 0005            00005  3347=          LA     R9,5(R9)                                               00805001
001D84 47F0 CA0C            01D54  3348=          B      CP81B                                                  00806001
                                   3349=*                                                                       00807001
001D88 D201 D5F8 900B 005F8 0000B  3350=CP81C     MVC    WORKPL(2),11(R9)                                       00808001
001D8E 4870 D5F8            005F8  3351=          LH     R7,WORKPL                                              00809001
001D92 4B70 DA56            00A56  3352=          SH     R7,ONEENTRY                                            00810001
001D96 9120 9000      00000        3353=          TM     0(R9),X'20'                                            00811001
001D9A 4780 CA5A            01DA2  3354=          BZ     CP81F                                                  00812001
001D9E 4B70 DA56            00A56  3355=          SH     R7,ONEENTRY                                            00813001
001DA2 9102 9006      00006        3356=CP81F     TM     6(R9),X'02'                                            00814001
001DA6 4780 CAEA            01E32  3357=          BZ     CP81G                                                  00815001
001DAA 4110 DA9F            00A9F  3358=          LA     R1,CBVTAB+39           ### CHECK ###                   00816001
001DAE 5820 D620            00620  3359=          L      R2,SUTABCA                                             00817001
001DB2 1912                        3360=CP81H     CR     R1,R2                                                  00818001
001DB4 4780 CA82            01DCA  3361=          BE     CP81I                                                  00819001
001DB8 D500 2000 9005 00000 00005  3362=          CLC    0(1,R2),5(R9)                                          00820001
001DBE 4740 CA82            01DCA  3363=          BL     CP81I                                                  00821001
001DC2 4B20 5174            001BC  3364=          SH     R2,KH9                                                 00822001
001DC6 47F0 CA6A            01DB2  3365=          B      CP81H                                                  00823001
                                   3366=*                                                                       00824001
001DCA 5020 D620            00620  3367=CP81I     ST     R2,SUTABCA                                             00825001
001DCE 920A CAD7      01E1F        3368=          MVI    CP81J+1,X'0A'                                          00826001
001DD2 91F0 9006      00006        3369=          TM     6(R9),X'F0'                                            00827001
001DD6 4770 CA96            01DDE  3370=          BNZ    CP81K                                                  00828001
001DDA 921A CAD7      01E1F        3371=          MVI    CP81J+1,X'1A'                                          00829001
001DDE D201 D5F8 9017 005F8 00017  3372=CP81K     MVC    WORKPL(2),23(R9)                                       00830001
001DE4 48E0 D5F8            005F8  3373=          LH     R14,WORKPL                                             00831001
001DE8 41EE 9014            00014  3374=          LA     R14,20(R14,R9)                                         00832001
001DEC 9104 9006      00006        3375=          TM     6(R9),X'04'                                            00833001
001DF0 4710 CAEA            01E32  3376=          BO     CP81G                                                  00834001
001DF4 4BE0 5170            001B8  3377=CP81L     SH     R14,KH5                                                00835001
001DF8 91FF E002      00002        3378=          TM     2(R14),X'FF'                                           00836001
001DFC 4780 CAEA            01E32  3379=          BZ     CP81G                                                  00837001
001E00 9170 CAD7      01E1F        3380=          TM     CP81J+1,X'70'                                          00838001
001E04 47E0 CAC4            01E0C  3381=          BNO    CP81M                                                  00839001
001E08 41E9 0019            00019  3382=          LA     R14,25(R9)                                             00840001
001E0C 9140 E000      00000        3383=CP81M     TM     0(R14),X'40'                                           00841001
001E10 4780 CADA            01E22  3384=          BZ     CP81N                                                  00842001
001E14 D201 CAD8 E003 01E20 00003  3385=          MVC    CP81J+2(2),3(R14)                                      00843001
001E1A 4520 55A2            005EA  3386=          BAL    R2,GENTXT4             GENERATE 4 BYTES                00844001
001E1E 580A 0000            00000  3387=CP81J     L      R0,0(R10)              *** GENERATED CODE ***          00845001
001E22 4810 CAD6            01E1E  3388=CP81N     LH     R1,CP81J                                               00846001
001E26 4111 0010            00010  3389=          LA     R1,16(R1)                                              00847001
001E2A 4010 CAD6            01E1E  3390=          STH    R1,CP81J                                               00848001
001E2E 47F0 CAAC            01DF4  3391=          B      CP81L                                                  00849001
                                   3392=*                                                                       00850001
001E32 9207 DA43      00A43        3393=CP81G     MVI    CII+1,X'07'                                            00851001
001E36 D201 DA46 DA50 00A46 00A50  3394=          MVC    RII(2),ZEROHW                                          00852001
001E3C 9108 9006      00006        3395=          TM     6(R9),X'08'                                            00853001
001E40 4710 CB20            01E68  3396=          BO     CP81P                                                  00854001
001E44 9105 9006      00006        3397=          TM     6(R9),X'05'                                            00855001
001E48 4780 CA14            01D5C  3398=          BZ     CP81D                                                  00856001
001E4C D201 CB10 900B 01E58 0000B  3399=CP81Q     MVC    CP81R+2(2),11(R9)                                      00857001
001E52 4520 55A6            005EE  3400=          BAL    R2,GENTXT6             GENERATE 6 BYTES                00858001
001E56 58FA 0000            00000  3401=CP81R     L      R15,0(R10)             *** GENERATED CODE ***          00859001
001E5A 07FF                        3402=          BR     R15                    *** GENERATED CODE ***          00860001
                                   3403=*                                                                       00861001
001E5C 4540 CBBC            01F04  3404=          BAL    R4,CP43Y                                               00862001
001E60 4540 CB9E            01EE6  3405=          BAL    R4,CP81S                                               00863001
001E64 47F0 CA14            01D5C  3406=          B      CP81D                                                  00864001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                          X390 3.1.04  2012/08/17 13.13

                                     3407=*                                                                         00865001
001E68 91F0 9006        00006        3408=CP81P     TM    6(R9),X'F0'                                               00866001
001E6C 4770 CB04              01E4C  3409=          BNZ   CP81Q                                                     00867001
001E70 9140 900F        0000F        3410=          TM    15(R9),X'40'                                              00868001
001E74 4780 CB3E              01E86  3411=          BZ    CP81T                                                     00869001
001E78 D201 CB3C 9012 01E84 00012    3412=          MVC   CP81U+2(2),18(R9)                                         00870001
001E7E 4520 55A2              005EA  3413=          BAL   R2,GENTXT4              GENERATE 4 BYTES                  00871001
001E82 580A 0000              00000  3414=CP81U     L     R0,0(R10)               *** GENERATED CODE ***            00872001
001E86 D201 CB4A 9009 01E92 00009    3415=CP81T     MVC   CP81UA+2(2),9(R9)                                         00873001
001E8C 4520 55A6              005EE  3416=          BAL   R2,GENTXT6              GENERATE 6 BYTES                  00874001
001E90 58FC 0000              00000  3417=CP81UA    L     R15,0(R12)              *** GENERATED CODE ***            00875001
001E94 060F                          3418=          BCTR  R0,R15                  *** GENERATED CODE ***            00876001
001E96 47F0 CB04              01E4C  3419=          B     CP81Q                                                     00877001
                                     3420=*                                                                         00878001
001E9A 8031                          3421=CP47YB    DC    X'8031'                                                   00879001
001E9C 4199 0005              00005  3422=CP43A     LA    R9,5(R9)                                                  00880001
001EA0 47F0 CB66              01EAE  3423=          B     CP43N                                                     00881001
                                     3424=*                                                                         00882001
001EA4 4199 0005              00005  3425=CP47A     LA    R9,5(R9)                                                  00883001
001EA8 4199 0005              00005  3426=CP49A     LA    R9,5(R9)                                                  00884001
001EAC 06A0                          3427=CP47ZW    BCTR  R10,R0                                                    00885001
001EAE 9525 8000        00000        3428=CP43N     CLI   0(R8),X'25'                                               00886001
001EB2 4770 CB74              01EBC  3429=          BNE   CP81WA                                                    00887001
001EB6 92FF DA61        00A61        3430=          MVI   GPBN+1,X'FF'                                              00888001
001EBA 07F5                          3431=          BR    R5                      RETURN                            00889001
                                     3432=*                                                                         00890001
001EBC 951C 8000        00000        3433=CP81WA    CLI   0(R8),X'1C'                                               00891001
001EC0 4770 CB88              01ED0  3434=          BNE   CP81WB                                                    00892001
001EC4 92FF DA61        00A61        3435=          MVI   GPBN+1,X'FF'                                              00893001
001EC8 4BB0 517C              001C4  3436=          SH    R11,KH290                                                 00894001
001ECC 06A0                          3437=          BCTR  R10,R0                                                    00895001
001ECE 06A0                          3438=CP45A     BCTR  R10,R0                                                    00896001
001ED0 41AA 0001              00001  3439=CP81WB    LA    R10,1(R10)                                                00897001
001ED4 D200 A000 8000 00000 00000    3440=          MVC   0(1,R10),0(R8)                                            00898001
001EDA 07F5                          3441=          BR    R5                                                        00899001
                                     3442=*                                                                         00900001
001EDC D201 D5F8 9009 005F8 00009    3443=CP47YF    MVC   WORKPL(2),9(R9)                                           00901001
001EE2 4810 D5F8              005F8  3444=CP45XB    LH    R1,WORKPL                                                 00902001
001EE6 5A10 D61C              0061C  3445=CP81S     A     R1,LATAB                                                  00903001
001EEA 5061 0000              00000  3446=          ST    R6,0(R1)                                                  00904001
001EEE 07F4                          3447=          BR    R4                                                        00905001
001EF0 5040 CC24              01F6C  3448=CP40H     ST    R4,CP81SA                                                 00906001
001EF4 4540 5E70              00EB8  3449=          BAL   R4,LATRES                                                 00907001
001EF8 D201 9009 D0A2 00009 000A2    3450=          MVC   9(2,R9),LN                                                00908001
001EFE 5840 CC24              01F6C  3451=          L     R4,CP81SA                                                 00909001
001F02 07F4                          3452=          BR    R4                                                        00910001
                                     3453=*                                                                         00911001
001F04 D201 D5F8 9007 005F8 00007    3454=CP43Y     MVC   WORKPL(2),7(R9)                                           00912001
001F0A 4810 D5F8              005F8  3455=          LH    R1,WORKPL                                                 00913001
001F0E 4111 0004              00004  3456=          LA    R1,4(R1)                                                  00914001
001F12 07F4                          3457=          BR    R4                                                        00915001
                                     3458=*                                                                         00916001
001F14 D201 CBE6 9011 01F2E 00011    3459=CP40X     MVC   CP81WE+2(2),17(R9)                                        00917001
001F1A D201 CBE8 9007 01F30 00007    3460=          MVC   CP81WE+4(2),7(R9)                                         00918001
001F20 96A0 CBE6        01F2E        3461=          OI    CP81WE+2,X'A0'                                            00919001
001F24 96C0 CBE8        01F30        3462=          OI    CP81WE+4,X'C0'                                            00920001
001F28 4520 55A6              005EE  3463=          BAL   R2,GENTXT6              GENERATE 6 BYTES                  00921001
001F2C D203 A000 C000 00000 00000    3464=CP81WE    MVC   0(4,R10),0(R12)         *** GENERATED CODE ***            00922001
001F32 07FE                          3465=          BR    R14                                                       00923001
                                     3466=*                                                                         00924001
001F34 4199 0005              00005  3467=CP45T     LA    R9,5(R9)                                                  00925001
001F38 5040 CC24              01F6C  3468=          ST    R4,CP81SA                                                 00926001
001F3C 9120 9000        00000        3469=          TM    0(R9),X'20'                                               00927001
001F40 4710 CC04              01F4C  3470=          BO    CP81WF                                                    00928001
001F44 4540 593C              00984  3471=          BAL   R4,ROUTINE1                                               00929001
001F48 47F0 CC0C              01F54  3472=          B     CP81WG                                                    00930001
                                     3473=*                                                                         00931001
001F4C 4540 59F2              00A3A  3474=CP81WF    BAL   R4,ROUTINE3                                               00932001
001F50 4A70 DA56              00A56  3475=          AH    R7,ONEENTRY                                               00933001
001F54 4B90 5170              001B8  3476=CP81WG    SH    R9,KH5                                                    00934001
001F58 5840 CC24              01F6C  3477=CP81WH    L     R4,CP81SA                                                 00935001
001F5C D201 4006 DA6A 00006 00A6A    3478=          MVC   6(2,R4),WPLACE                                            00936001
001F62 D300 4006 DA72 00006 00A72    3479=          MVZ   6(1,R4),VPLACE                                            00937001
001F68 07F4                          3480=          BR    R4                                                        00938001
                                     3481=*                                                                         00939001
001F6A 0000
001F6C 00000000                      3482=CP81SA    DC    F'0'                     SAVEAREA FOR R4                  00940001
                                     3483=*                                                                         00941001
001F70 5040 CC24              01F6C  3484=CP45D     ST    R4,CP81SA                                                 00942001
001F74 4140 CC10              01F58  3485=          LA    R4,CP81WH                                                 00943001
001F78 4530 5CB4              00CFC  3486=          BAL   R3,ROUTIN15                                               00944001
001F7C 5840 CC24              01F6C  3487=          L     R4,CP81SA                                                 00945001
001F80 4144 000C              0000C  3488=          LA    R4,12(R4)                                                 00946001
001F84 D100 4005 DA72 00005 00A72    3489=          MVN   5(1,R4),VPLACE                                            00947001
001F8A 9102 9001        00001        3490=          TM    1(R9),X'02'                                               00948001
001F8E 4710 5C08              00C50  3491=          BO    ROUTIN12                                                  00949001
001F92 47F0 5AF2              00B3A  3492=          B     ROUTINE8                                                  00950001
                                     3493=*                                                                         00951001
001F96 4540 50EA              00132  3494=CP81WI    BAL   R4,NXTOPT                                                 00952001
001F9A 92FF DA61        00A61        3495=CP47YD    MVI   GPBN+1,X'FF'                                              00953001
001F9E 5820 D618              00618  3496=          L     R2,AOPTABE                                                00954001
001FA2 D500 9005 2000 00005 00000    3497=          CLC   5(1,R9),0(R2)                                             00955001
001FA8 4780 CC6C              01FB4  3498=          BE    CP81WJ                                                    00956001
001FAC 9601 9014        00014        3499=          OI    20(R9),X'01'                                              00957001
001FB0 47F0 CD44              0208C  3500=          B     CP81WK                                                    00958001
                                     3501=*                                                                         00959001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

001FB4 D300 2002 CFF0 00002 02338  3502=CP81WJ  MVZ    2(1,R2),CP81WL                                        00960001
001FBA 4110 DA9F            00A9F  3503=        LA     R1,CBVTAB+39                                          00961001
001FBE 4111 0009            00009  3504=CP81WM  LA     R1,9(R1)                                              00962001
001FC2 5910 D620            00620  3505=        C      R1,SUTABCA                                            00963001
001FC6 4720 CD12            0205A  3506=        BH     CP81WN                                                00964001
001FCA D502 200B 1001 0000B 00001  3507=        CLC    11(3,R2),1(R1)                                        00965001
001FD0 4770 CC76            01FBE  3508=        BNE    CP81WM                                                00966001
001FD4 D500 2000 1000 00000 00000  3509=        CLC    0(1,R2),0(R1)                                         00967001
001FDA 4770 CE5C            021A4  3510=        BNE    CP81WP                                                00968001
001FDE D100 CFF0 200A 02338 0000A  3511=CP81WQ  MVN    CP81WL(1),10(R2)                                      00969001
001FE4 1B33                        3512=        SR     R3,R3                                                 00970001
001FE6 4330 CFF0            02338  3513=        IC     R3,CP81WL                                             00971001
001FEA 5840 CFD4            0231C  3514=        L      R4,CP81WR                                             00972001
001FEE 8840 3000            00000  3515=        SRL    R4,0(R3)                                              00973001
001FF2 4040 D5F8            005F8  3516=        STH    R4,WORKPL                                             00974001
001FF6 D601 1007 D5F8 00007 005F8  3517=        OC     7(2,R1),WORKPL                                        00975001
001FFC 8930 0002            00002  3518=        SLL    R3,2                                                  00976001
002000 4133 0014            00014  3519=        LA     R3,20(R3)                                             00977001
002004 4A32 0002            00002  3520=        AH     R3,2(R2)                                              00978001
002008 4032 0002            00002  3521=        STH    R3,2(R2)                                              00979001
00200C 4530 CEC2            0220A  3522=        BAL    R3,CP81WS                                             00980001
002010 0007                        3523=        DC     H'7'                                                  00981001
                                   3524=*                                                                    00982001
002012 1A1B                        3525=        AR     R1,R11                                                00983001
                                   3526=*                                                                    00984001
002014 0040                        3527=CP47YC  DC     X'0040'                                               00985001
002016 D501 DA50 2005 00A50 00005  3528=        CLC    ZEROHW(2),5(R2)                                       00986001
00201C 4780 CC4E            01F96  3529=        BE     CP81WI                                                00987001
002020 9102 9019      00019        3530=        TM     25(R9),X'02'                                          00988001
002024 4780 CCEE            02036  3531=        BZ     CP81WT                                                00989001
002028 4530 CEC2            0220A  3532=        BAL    R3,CP81WS                                             00990001
                                   3533=*                                                                    00991001
00202C 0004                        3534=        DC     X'0004'                                               00992001
00202E 1A1B                        3535=        AR     R1,R11                                                00993001
                                   3536=*                                                                    00994001
002030 8080                        3537=        DC     X'8080'                                               00995001
                                   3538=*                                                                    00996001
002032 47F0 CC4E            01F96  3539=        B      CP81WI                                                00997001
                                   3540=*                                                                    00998001
002036 9602 9019      00019        3541=CP81WT  OI     25(R9),X'02'                                          00999001
00203A 9180 200A      0000A        3542=        TM     10(R2),X'80'                                          01000001
00203E 4780 CD04            0204C  3543=        BZ     CP81WU                                                01001001
002042 4520 559E            005E6  3544=        BAL    R2,GENTXT2                    GENERATE 2 BYTES        01002001
002046 1B88                        3545=        SR     R8,R8                         *** GENERATED CODE ***  01003001
002048 5820 CFD8            02320  3546=        L      R2,CP81WV                                             01004001
00204C 4530 CEC2            0220A  3547=CP81WU  BAL    R3,CP81WS                                             01005001
                                   3548=*                                                                    01006001
002050 0004                        3549=        DC     X'0004'                                               01007001
                                   3550=*                                                                    01008001
002052 181B                        3551=        LR     R1,R11                                                01009001
                                   3552=*                                                                    01010001
002054 8080                        3553=        DC     X'8080'                                               01011001
                                   3554=*                                                                    01012001
002056 47F0 CC4E            01F96  3555=        B      CP81WI                                                01013001
                                   3556=*                                                                    01014001
00205A 4130 DDA8            00DA8  3557=CP81WN  LA     R3,SUTABC+L'SUTABC                                    01015001
00205E 1913                        3558=        CR     R1,R3                                                 01016001
002060 47B0 CC4E            01F96  3559=        BNL    CP81WI                                                01017001
002064 5010 D620            00620  3560=        ST     R1,SUTABCA                                            01018001
002068 D202 1001 200B 00001 0000B  3561=        MVC    1(3,R1),11(R2)                                        01019001
00206E D201 1007 DA50 00007 00A50  3562=        MVC    7(2,R1),ZEROHW                                        01020001
002074 4130 0004            00004  3563=        LA     R3,4                                                  01021001
002078 4A32 0002            00002  3564=        AH     R3,2(R2)                                              01022001
00207C 4030 CFEE            02336  3565=        STH    R3,WA2_B+2                                            01023001
002080 D200 CFED 2001 02335 00001  3566=        MVC    WA2_B+1(1),1(R2)                                      01024001
002086 D200 1000 9005 00000 00005  3567=CP81YA  MVC    0(1,R1),5(R9)                                         01025001
00208C 9012 CFD8            02320  3568=CP81WK  STM    R1,R2,CP81WV                                          01026001
002090 D501 CFF4 5170 0233C 001B8  3569=        CLC    WA2_C,KH5                                             01027001
002096 4780 CD9E            020E6  3570=        BE     CP81YB                                                01028001
00209A 9102 9019      00019        3571=        TM     25(R9),X'02'                                          01029001
00209E 4780 CD96            020DE  3572=        BZ     CP81YC                                                01030001
0020A2 4540 593C            00984  3573=        BAL    R4,ROUTINE1                                           01031001
0020A6 D201 CE4E DA6A 02196 00A6A  3574=        MVC    CP81YD+2(2),WPLACE                                    01032001
0020AC D300 CE4E DA72 02196 00A72  3575=        MVZ    CP81YD+2(1),VPLACE                                    01033001
0020B2 D300 CE51 CCCC 02199 02014  3576=        MVZ    CP81YE+1(1),CP47YC                                    01034001
0020B8 4120 CE4A            02192  3577=        LA     R2,CP81YF                                             01035001
0020BC 45E0 5588            005D0  3578=        BAL    R14,GENTXTS                   GENERATE CODE           01036001
0020C0 0008                        3579=        DC     H'8'                          GENERATE 8 BYTES        01037001
                                   3580=*                                                                    01038001
0020C2 9108 9006      00006        3581=        TM     6(R9),X'08'                                           01039001
0020C6 4780 CD96            020DE  3582=        BZ     CP81YC                                                01040001
0020CA 9201 CFEC      02334        3583=        MVI    WA2_B,X'01'                                           01041001
0020CE D201 CE56 900D 0219E 0000D  3584=        MVC    CP81YG+2(2),13(R9)                                    01042001
0020D4 4120 CE52            0219A  3585=        LA     R2,CP81YH                                             01043001
0020D8 45E0 5588            005D0  3586=        BAL    R14,GENTXTS                   GENERATE CODE           01044001
0020DC 000A                        3587=        DC     H'10'                         GENERATE 10 BYTES       01045001
                                   3588=*                                                                    01046001
0020DE 9104 9006      00006        3589=CP81YC  TM     6(R9),X'04'                                           01047001
0020E2 4710 CE20            02168  3590=        BO     CP81YI                                                01048001
0020E6 9101 9014      00014        3591=CP81YB  TM     20(R9),X'01'                                          01049001
0020EA 4710 CE36            0217E  3592=        BO     CP81YJ                                                01050001
0020EE 9170 CCCC      02014        3593=        TM     CP47YC,X'70'                                          01051001
0020F2 4710 CE20            02168  3594=        BO     CP81YI                                                01052001
0020F6 4540 5AB0            00AF8  3595=        BAL    R4,ROUTINE7                                           01053001
0020FA 89E0 0004            00004  3596=        SLL    R14,4                                                 01054001
0020FE 42E0 CCCC            02014  3597=        STC    R14,CP47YC                                            01055001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

002102 47F0 CDC2             0210A  3598=          B      CP81YK                                               01056001
                                    3599=*                                                                     01057001
002106 4A70 DA56             00A56  3600=CP81YL    AH     R7,ONEENTRY                                          01058001
00210A 45E0 CE70             021B8  3601=CP81YK    BAL    R14,CP40Q                                            01059001
00210E 4070 DA5E             00A5E  3602=          STH    R7,SPBNST+2                                          01060001
002112 D202 901B DA5D 0001B 00A5D  3603=          MVC    27(3,R9),SPBNST+1                                    01061001
002118 D300 901C CCCC 0001C 02014  3604=          MVZ    28(1,R9),CP47YC                                      01062001
00211E 4137 0004             00004  3605=          LA     R3,4(R7)                                             01063001
002122 4030 CE5A             021A2  3606=          STH    R3,CP81YM+2                                          01064001
002126 4177 0008             00008  3607=          LA     R7,8(R7)                                             01065001
00212A 4B70 DA56             00A56  3608=          SH     R7,ONEENTRY                                          01066001
00212E 1B33                         3609=          SR     R3,R3                                                01067001
002130 4330 CCCC             02014  3610=          IC     R3,CP47YC                                            01068001
002134 8830 0002             00002  3611=          SRL    R3,2                                                 01069001
002138 4149 0019             00019  3612=          LA     R4,25(R9)                                            01070001
00213C 5043 D5C0             005C0  3613=          ST     R4,RUTI(R3)                                          01071001
002140 9812 CFD8             02320  3614=          LM     R1,R2,CP81WV                                         01072001
002144 4133 D5C1             005C1  3615=          LA     R3,RUTI+1(R3)                                        01073001
002148 D202 1004 3000 00004 00000  3616=          MVC    4(3,R1),0(R3)                                        01074001
00214E D200 CE17 CCCC 0215F 02014  3617=          MVC    CP81YNA+1(1),CP47YC                                  01075001
002154 1831                         3618=          LR     R3,R1                                                01076001
002156 4110 CFED             02335  3619=          LA     R1,WA2_B+1                                           01077001
00215A 4540 CE8E             021D6  3620=          BAL    R4,CP81YN                                            01078001
00215E 5800 0000             00000  3621=CP81YNA   L      R0,0                                                 01079001
002162 1813                         3622=          LR     R1,R3                                                01080001
002164 47F0 CC96             01FDE  3623=          B      CP81WQ                                               01081001
                                    3624=*                                                                     01082001
002168 1BEE                         3625=CP81YI    SR     R14,R14                                              01083001
00216A 43E0 CCCC             02014  3626=          IC     R14,CP47YC                                           01084001
00216E 88E0 0004             00004  3627=          SRL    R14,4                                                01085001
002172 4540 5B4E             00B96  3628=          BAL    R4,ROUTINE9                                          01086001
002176 9101 9014       00014        3629=          TM     20(R9),X'01'                                         01087001
00217A 4780 CDBE             02106  3630=          BZ     CP81YL                                               01088001
00217E 91F0 9006       00006        3631=CP81YJ    TM     6(R9),X'F0'                                          01089001
002182 4770 C9B2             01CFA  3632=          BNZ    CP49Q                                                01090001
002186 9101 CFEC       02334        3633=          TM     WA2_B,X'01'                                          01091001
00218A 4710 C870             01BB8  3634=          BO     CP47YH                                               01092001
00218E 47F0 C85C             01BA4  3635=          B      CP47YE                                               01093001
                                    3636=*                                                                     01094001
002192 18F8                         3637=CP81YF    LR     R15,R8                                               01095001
002194 5CE0 0000             00000  3638=CP81YD    M      R14,0                                                01096001
002198 1A0F                         3639=CP81YE    AR     R0,R15                                               01097001
00219A 18F8                         3640=CP81YH    LR     R15,R8                                               01098001
00219C 5CEA 0000             00000  3641=CP81YG    M      R14,0(R10)                                           01099001
0021A0 50FA 0000             00000  3642=CP81YM    ST     R15,0(R10)                                           01100001
0021A4 D203 D5F8 1003 005F8 00003  3643=CP81WP    MVC    WORKPL(4),3(R1)                                      01101001
0021AA 5830 D5F8             005F8  3644=          L      R3,WORKPL                                            01102001
0021AE D202 CFED 3002 02335 00002  3645=          MVC    WA2_B+1(3),2(R3)                                     01103001
0021B4 47F0 CD3E             02086  3646=          B      CP81YA                                               01104001
                                    3647=*                                                                     01105001
0021B8 4540 5E38             00E80  3648=CP40Q     BAL    R4,MOVEOPDK                                          01106001
0021BC D213 9000 9005 00000 00005  3649=          MVC    0(20,R9),5(R9)                                       01107001
0021C2 4830 CFF4             0233C  3650=          LH     R3,WA2_C                                             01108001
0021C6 4133 0005             00005  3651=          LA     R3,5(R3)                                             01109001
0021CA 4030 CFF4             0233C  3652=          STH    R3,WA2_C                                             01110001
0021CE D204 9014 CFF1 00014 02339  3653=          MVC    20(5,R9),CP81YQ                                      01111001
0021D4 07FE                         3654=          BR     R14                                                  01112001
                                    3655=*                                                                     01113001
0021D6 9024 CFD8             02320  3656=CP81YN    STM    R2,R4,CP81WV                                         01114001
0021DA 5090 CFE4             0232C  3657=          ST     R9,CP81YR+2                                          01115001
0021DE 1891                         3658=          LR     R9,R1                                                01116001
0021E0 4B90 516C             001B4  3659=          SH     R9,KH2                                               01117001
0021E4 4540 593C             00984  3660=          BAL    R4,ROUTINE1                                          01118001
0021E8 5820 CFE0             02328  3661=          L      R2,CP81YS+2                                          01119001
0021EC D201 2002 DA6A 00002 00A6A  3662=          MVC    2(2,R2),WPLACE                                       01120001
0021F2 D300 2002 DA72 00002 00A72  3663=          MVZ    2(1,R2),VPLACE                                       01121001
0021F8 45E0 5588             005D0  3664=          BAL    R14,GENTXTS               GENERATE CODE              01122001
0021FC 0004                         3665=          DC     H'4'                      GENERATE 4 BYTES           01123001
                                    3666=*                                                                     01124001
0021FE 9824 CFD8             02320  3667=          LM     R2,R4,CP81WV                                         01125001
002202 5890 CFE4             0232C  3668=          L      R9,CP81YR+2                                          01126001
002206 47F4 0004             00004  3669=          B      4(R4)                                                01127001
                                    3670=*                                                                     01128001
00220A 1812                         3671=CP81WS    LR     R1,R2                                                01129001
00220C 4A13 0000             00000  3672=          AH     R1,0(R3)                                             01130001
002210 D501 DA50 1001 00A50 00001  3673=          CLC    ZEROHW(2),1(R1)                                      01131001
002216 4783 0006             00006  3674=          BE     6(R3)                                                01132001
00221A D200 CEE3 3005 0222B 00005  3675=          MVC    CP81YT+1(1),5(R3)                                    01133001
002220 D201 CF12 3003 0225A 00003  3676=          MVC    CP81YU(2),3(R3)                                      01134001
002226 960F CF13       0225B        3677=          OI     CP81YU+1,X'0F'                                       01135001
00222A 9100 200A       0000A        3678=CP81YT    TM     10(R2),X'00'                                         01136001
00222E 4710 CEF0             02238  3679=          BO     CP81YV                                               01137001
002232 D200 CF12 3002 0225A 00002  3680=          MVC    CP81YU(1),2(R3)                                      01138001
002238 D501 516E 1001 0016E 00001  3681=CP81YV    CLC    366(2,R5),1(R1)                                      01139001
00223E 4780 CF1C             02264  3682=          BE     CP81YW                                               01140001
002242 4540 CE8E             021D6  3683=          BAL    R4,CP81YN                                            01141001
002246 58F0 0000             00000  3684=          L      R15,0                                                01142001
00224A 4112 0001             00001  3685=          LA     R1,1(R2)                                             01143001
00224E 4540 CE8E             021D6  3686=          BAL    R4,CP81YN                                            01144001
002252 5CE0 0000             00000  3687=          M      R14,0                                                01145001
002256 4520 559E             005E6  3688=          BAL    R2,GENTXT2                GENERATE 2 BYTES           01146001
00225A 1A0F                         3689=CP81YU    AR     R0,R15                    *** GENERATED CODE ***     01147001
00225C 9823 CFD8             02320  3690=          LM     R2,R3,CP81WV                                         01148001
002260 47F3 0006             00006  3691=          B      6(R3)                                                01149001
                                    3692=*                                                                     01150001
002264 4112 0001             00001  3693=CP81YW    LA     R1,1(R2)                                             01151001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

002268 D201 CF32 CF12 0227A 0225A  3694=         MVC   CP81ZA(2),CP81YU                                               01152001
00226E 9640 CF32      0227A        3695=         OI    CP81ZA,X'40'                                                   01153001
002272 94F0 CF33      0227B        3696=         NI    CP81ZA+1,X'F0'                                                 01154001
002276 4540 CE8E            021D6  3697=         BAL   R4,CP81YN                                                      01155001
00227A 5800 0000            00000  3698=CP81ZA   L     R0,0                                                           01156001
00227E 47F3 0006            00006  3699=         B     6(R3)                                                          01157001
                                   3700=*                                                                             01158001
002282 D201 D5F8 9017 005F8 00017  3701=CP47YJ   MVC   WORKPL(2),23(R9)                                               01159001
002288 4810 D5F8            005F8  3702=         LH    R1,WORKPL                                                      01160001
00228C 4111 900F            0000F  3703=         LA    R1,15(R1,R9)                                                   01161001
002290 9102 1000      00000        3704=CP81ZB   TM    0(R1),X'02'                                                    01162001
002294 4780 CFAE            022F6  3705=         BZ    CP81ZC                                                         01163001
002298 5010 CFD8            02320  3706=         ST    R1,CP81WV                                                      01164001
00229C D201 D5F8 1003 005F8 00003  3707=         MVC   WORKPL(2),3(R1)                                                01165001
0022A2 940F D5F8      005F8        3708=         NI    WORKPL,X'0F'                                                   01166001
0022A6 4820 D5F8            005F8  3709=         LH    R2,WORKPL                                                      01167001
0022AA 4020 CFCA            02312  3710=         STH   R2,CP81ZD+2                                                    01168001
0022AE 4020 CFD2            0231A  3711=         STH   R2,CP81ZE+2                                                    01169001
0022B2 4142 0008            00008  3712=         LA    R4,8(R2)                                                       01170001
0022B6 4B40 DA56            00A56  3713=         SH    R4,ONEENTRY                                                    01171001
0022BA 4040 D5F8            005F8  3714=         STH   R4,WORKPL                                                      01172001
0022BE 4540 58BA            00902  3715=         BAL   R4,MAXCH                                                       01173001
0022C2 4122 0004            00004  3716=         LA    R2,4(R2)                                                       01174001
0022C6 9140 1000      00000        3717=         TM    0(R1),X'40'                                                    01175001
0022CA 4710 CF9C            022E4  3718=         BO    CP81ZF                                                         01176001
0022CE 4020 CF96            022DE  3719=         STH   R2,CP81ZG+2                                                    01177001
0022D2 D300 CF95 1003 022DD 00003  3720=         MVZ   CP81ZG+1(1),3(R1)                                              01178001
0022D8 4520 55A2            005EA  3721=         BAL   R2,GENTXT4              GENERATE 4 BYTES                       01179001
0022DC 5A0A 0000            00000  3722=CP81ZG   A     R0,0(R10)               *** GENERATED CODE ***                 01180001
0022E0 47F0 CFAA            022F2  3723=         B     CP81ZH                                                         01181001
                                   3724=*                                                                             01182001
0022E4 4020 CFCE            02316  3725=CP81ZF   STH   R2,CP81ZI+2                                                    01183001
0022E8 4120 CFC8            02310  3726=         LA    R2,CP81ZD                                                      01184001
0022EC 45E0 5588            005D0  3727=         BAL   R14,GENTXTS             GENERATE CODE                          01185001
0022F0 000C                        3728=         DC    H'12'                   GENERATE 12 BYTES                      01186001
                                   3729=*                                                                             01187001
0022F2 5810 CFD8            02320  3730=CP81ZH   L     R1,CP81WV                                                      01188001
0022F6 4B10 5170            001B8  3731=CP81ZC   SH    R1,KH5                                                         01189001
0022FA 91FF 1002      00002        3732=         TM    2(R1),X'FF'                                                    01190001
0022FE 4770 CF48            02290  3733=         BNZ   CP81ZB                                                         01191001
002302 91F0 9006      00006        3734=         TM    6(R9),X'F0'                                                    01192001
002306 4780 C88E            01BD6  3735=         BZ    CP47YK                                                         01193001
00230A 47F0 C9E8            01D30  3736=         B     CP49W                                                          01194001
                                   3737=*                                                                             01195001
00230E 0000
002310                             3738=         DC    0F'0'                                                          01196001
002310 58EA 0000            00000  3739=CP81ZD   L     R14,0(R10)              *** GENERATED CODE ***                 01197001
002314 5AEA 0000            00000  3740=CP81ZI   A     R14,0(R10)              *** GENERATED CODE ***                 01198001
002318 50EA 0000            00000  3741=CP81ZE   ST    R14,0(R10)              *** GENERATED CODE ***                 01199001
00231C 00008000                    3742=CP81WR   DC    X'00008000'                                                    01200001
002320 4770 4252            00252  3743=CP81WV   BNZ   594(,R4)                *** GENERATED CODE ***                 01201001
002324 1BFF                        3744=         SR    R15,R15                 *** GENERATED CODE ***                 01202001
002326 50F0 C6D0            01A18  3745=CP81YS   ST    R15,CP47ZG+2                                                   01203001
00232A 5860 C020            01368  3746=CP81YR   L     R6,CP6B                                                        01204001
00232E D203 6000 C0DC 00000 000DC  3747=WA2_A    MVC   0(4,R6),220(R12)                                               01205001
002334 47F0 4266            00266  3748=WA2_B    B     614(,R4)                                                       01206001
002338 00                          3749=CP81WL   DC    X'00'                                                          01207001
002339 80                          3750=CP81YQ   DC    X'80'                   *                                      01208001
00233A 31                          3751=         DC    X'31'                   |                                      01209001
00233B 00                          3752=         DC    X'00'                   |                                      01210001
00233C 0000                        3753=WA2_C    DC    H'0'                    V                                      01211001
                                   3754=*                                                                             01212001
                                   3755=*********************************************************************** 01213001
                                   3756=*                                                                             01214001
                                   3757=*        END OF IEX50002                                                      01215001
                                   3758=*                                                                             01216001
                                   3759=*********************************************************************** 01217001
                                   3760=*                                                                             01218001
                                   3761          COPY  IEX5000C                IEX50003 (RECOVERED) INIT              01932001
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  Active USINGs: IEX50000+X'1348',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   3763=*                                                                  00002001
                                   3764=********************************************************************** 00003001
                                   3765=*                                                                  00004001
                                   3766=*        THIS SOURCE FOR THE START OF IEX50003 WAS RECOVERED BY    00005001
                                   3767=*        DISASSMBLY OF THE LOAD MODULE                             00006001
                                   3768=*                                                                  00007001
                                   3769=********************************************************************** 00008001
                                   3770=*                                                                  00009001
                                   3771=*                                                                  00010001
                                   3772=********************************************************************** 00011001
                                   3773=*                                                                  00012001
                                   3774=*        COMPILER PROGRAM - CP0                                    00013001
                                   3775=*                                                                  00014001
                                   3776=********************************************************************** 00015001
                                   3777=*                                                                  00016001
                 R:C  0233E        3778=         USING CP0,R12                                             00017001
00233E 9101 D080      00080        3779=CP0      TM    COMPFLGS,OPERAND                                    00018001
002342 4780 C03A            02378  3780=         BZ    CP0D                                                00019001
002346 9525 A000      00000        3781=         CLI   0(R10),X'25'                                        00020001
00234A 4780 C030            0236E  3782=         BE    CP0C                                                00021001
00234E 4540 5304            0034C  3783=         BAL   R4,SERR4                                            00022001
002352 00A4                        3784=         DC    H'164'               ERROR 164                      00023001
                                   3785=*                                                                  00024001
002354 4190 9005            00005  3786=CP0A     LA    R9,5(,R9)                                           00025001
002358 4540 5E30            00E78  3787=CP0B     BAL   R4,MOVEOPTK                                         00026001
00235C D200 A000 8000 00000 00000  3788=         MVC   0(1,R10),0(R8)                                      00027001
002362 950C 8000      00000        3789=         CLI   0(R8),X'0C'                                         00028001
002366 0785                        3790=         BER   R5                                                  00029001
002368 4540 5D14            00D5C  3791=         BAL   R4,PBNHDL                                           00030001
00236C 07F5                        3792=         BR    R5                                                  00031001
                                   3793=*                                                                  00032001
00236E 4540 5380            003C8  3794=CP0C     BAL   R4,SERR1                                            00033001
002372 00AD                        3795=         DC    H'173'               ERROR 173                      00034001
                                   3796=*                                                                  00035001
002374 47F0 C016            02354  3797=         B     CP0A                                                00036001
                                   3798=*                                                                  00037001
002378 950D 8000      00000        3799=CP0D     CLI   0(R8),X'0D'                                         00038001
00237C 4770 C01A            02358  3800=         BNE   CP0B                                                00039001
002380 9180 D080      00080        3801=         TM    COMPFLGS,COMPMODE    SYNTAX CHECK MODE ?            00040001
002384 4710 C01A            02358  3802=         BO    CP0B                 YES, BRANCH                    00041001
002388 4540 5706            0074E  3803=         BAL   R4,CLEARRG                                          00042001
00238C D200 C063 8001 023A1 00001  3804=         MVC   CP0E+1(1),1(R8)                                     00043001
002392 4120 C062            023A0  3805=         LA    R2,CP0E                                             00044001
002396 45E0 5588            005D0  3806=         BAL   R14,GENTXTS                                         00045001
00239A 0008                        3807=         DC    H'8'                 LENGTH OF TXT                  00046001
                                   3808=*                                                                  00047001
00239C 47F0 C01A            02358  3809=         B     CP0B                                                00048001
                                   3810=*                                                                  00049001
0023A0 9200 D0A9      000A9        3811=CP0E     MVI   SAVOUTA+1,X'00'      *** GENERATED TEXT ***         00050001
0023A4 45FD 00E0            000E0  3812=         BAL   R15,PROLOG(R13,0)    *** GENERATED TEXT ***         00051001
                                   3813=*                                                                  00052001
                                   3814=********************************************************************** 00053001
                                   3815=*                                                                  00054001
                                   3816=*        COMPILER PROGRAM - CP1                                    00055001
                                   3817=*                                                                  00056001
                                   3818=********************************************************************** 00057001
                                   3819=*                                                                  00058001
                 R:C  023A8        3820=         USING CP1,R12                                             00059001
0023A8 9101 D080      00080        3821=CP1      TM    COMPFLGS,OPERAND                                    00060001
0023AC 4780 C04C            023F4  3822=         BZ    CP1A                                                00061001
0023B0 9180 D080      00080        3823=         TM    COMPFLGS,COMPMODE    SYNTAX CHECK MODE ?            00062001
0023B4 4710 C02E            023D6  3824=         BO    CP1B                 YES, BRANCH                    00063001
0023B8 9508 9001      00001        3825=         CLI   1(R9),X'08'                                         00064001
0023BC 4770 C04C            023F4  3826=         BNE   CP1A                                                00065001
0023C0 4540 5706            0074E  3827=         BAL   R4,CLEARRG                                          00066001
0023C4 D201 D5F8 9003 005F8 00003  3828=         MVC   WORKPL(2),3(R9)                                     00067001
0023CA 4810 D5F8            005F8  3829=         LH    R1,WORKPL                                           00068001
0023CE 5A10 D61C            0061C  3830=         A     R1,LATAB                                            00069001
0023D2 5060 1000            00000  3831=         ST    R6,0(,R1)                                           00070001
0023D6 950D A000      00000        3832=CP1B     CLI   0(R10),X'0D'                                        00071001
0023DA 4740 C046            023EE  3833=         BL    CP1C                                                00072001
0023DE 950F A000      00000        3834=         CLI   0(R10),X'0F'                                        00073001
0023E2 47B0 C046            023EE  3835=         BNL   CP1C                                                00074001
0023E6 4540 5E30            00E78  3836=         BAL   R4,MOVEOPTK                                         00075001
0023EA 920B A000      00000        3837=         MVI   0(R10),X'0B'                                        00076001
0023EE 4190 9005            00005  3838=CP1C     LA    R9,5(,R9)                                           00077001
0023F2 07F5                        3839=         BR    R5                                                  00078001
                                   3840=*                                                                  00079001
0023F4 58C0 52F4            0033C  3841=CP1A     L     R12,SCPTAB+4*84      R12 -> CP84                    00080001
0023F8 07FC                        3842=         BR    R12                                                 00081001
                                   3843=*                                                                  00082001
                                   3844=********************************************************************** 00083001
                                   3845=*                                                                  00084001
                                   3846=*        COMPILER PROGRAM - CP3                                    00085001
                                   3847=*                                                                  00086001
                                   3848=********************************************************************** 00087001
                                   3849=*                                                                  00088001
                 R:C  023FA        3850=         USING CP3,R12                                             00089001
0023FA 9101 D080      00080        3851=CP3      TM    COMPFLGS,OPERAND                                    00090001
0023FE 4710 C01C            02416  3852=         BO    CP3A                                                00091001
002402 9104 D080      00080        3853=         TM    COMPFLGS,PROC                                       00092001
002406 4710 C018            02412  3854=         BO    CP3B                                                00093001
00240A 4520 55A2            005EA  3855=         BAL   R2,GENTXT4           GENERATE 4 BYTES               00094001
00240E 47FD 010E            0010E  3856=         B     TERMNTE(FSA)         *** GENERATED TEXT ***         00095001
                                   3857=*                                                                  00096001
002412 47F0 53EA            00432  3858=CP3B     B     CPEND                                               00097001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

                                    3859=*                                                                      00098001
002416 58C0 52F4              0033C 3860=CP3A       L     R12,SCPTAB+4*84        R12 -> CP84                    00099001
00241A 07FC                         3861=           BR    R12                                                   00100001
                                    3862=*                                                                      00101001
                                    3863=*********************************************************************** 00102001
                                    3864=*                                                                      00103001
                                    3865=*          COMPILER PROGRAM - CP4                                      00104001
                                    3866=*                                                                      00105001
                                    3867=*********************************************************************** 00106001
                                    3868=*                                                                      00107001
                 R:C  0241C         3869=           USING CP4,R12                                               00108001
00241C 9101 D080       00080        3870=CP4        TM    COMPFLGS,OPERAND                                      00109001
002420 4780 C012              0242E 3871=           BZ    CP4A                                                  00110001
002424 4540 5304              0034C 3872=           BAL   R4,SERR4                                              00111001
002428 00A4                         3873=           DC    H'164'                 ERROR 164                      00112001
                                    3874=*                                                                      00113001
00242A 4199 0005              00005 3875=           LA    R9,5(R9)                                              00114001
00242E 4540 5E30              00E78 3876=CP4A       BAL   R4,MOVEOPTK                                           00115001
002432 D200 A000 8000 00000 00000   3877=           MVC   0(1,R10),0(R8)                                        00116001
002438 9509 8000       00000        3878=           CLI   0(R8),X'09'                                           00117001
00243C 4780 C1CE              025EA 3879=           BE    CP4B                                                  00118001
002440 4B90 5170              001B8 3880=           SH    R9,KH5                                                00119001
002444 4540 5E38              00E80 3881=           BAL   R4,MOVEOPDK                                           00120001
002448 9500 DA5D       00A5D        3882=           CLI   SPBNST+1,0                                            00121001
00244C 4780 C04C              02468 3883=           BE    CP4C                                                  00122001
002450 4540 5E70              00EB8 3884=           BAL   R4,LATRES                                             00123001
002454 4010 C048              02464 3885=           STH   R1,CP4D+2              UPDATE GENERATED CODE          00124001
002458 D201 9003 C048 00003 02464   3886=           MVC   3(2,R9),CP4D+2                                        00125001
00245E 4520 55A6              005EE 3887=           BAL   R2,GENTXT6             GENERATE 6 BYTES               00126001
002462 58FC 0000              00000 3888=CP4D       L     R15,0(R12)             *** GENERATED CODE ***         00127001
002466 07FF                         3889=           BR    R15                    *** GENERATED CODE ***         00128001
                                    3890=*                                                                      00129001
002468 950A 8000       00000        3891=CP4C       CLI   0(R8),X'0A'                                           00130001
00246C 0785                         3892=           BER   R5                     RETURN TO SUBSTART             00131001
00246E 4540 5D14              00D5C 3893=           BAL   R4,PBNHDL                                             00132001
002472 4540 C198              025B4 3894=           BAL   R4,CP4E                                               00133001
002476 D204 9005 DA73 00005 00A73   3895=           MVC   5(5,R9),STRDNAME                                      00134001
00247C 4199 0005              00005 3896=           LA    R9,5(R9)                                              00135001
002480 4540 5CE8              00D30 3897=           BAL   R4,DECOMP                                             00136001
002484 D204 9000 DA73 00000 00A73   3898=           MVC   0(5,R9),STRDNAME                                      00137001
00248A 4B90 5170              001B8 3899=           SH    R9,KH5                                                00138001
00248E D201 DA64 5178 00A64 001C0   3900=           MVC   HALFW,KH15                                            00139001
002494 58F0 D61C              0061C 3901=           L     R15,LATAB                                             00140001
002498 4AF0 DA4E              00A4E 3902=           AH    R15,OPDLN                                             00141001
00249C 506F 0000              00000 3903=           ST    R6,0(R15)                                             00142001
0024A0 9180 D080       00080        3904=           TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?            00143001
0024A4 4710 C094              024B0 3905=           BO    CP4F                   YES, BRANCH                    00144001
0024A8 9506 8000       00000        3906=           CLI   0(R8),XFLBRAC                                         00145001
0024AC 4780 C0A8              024C4 3907=           BE    CP4G                                                  00146001
0024B0 94FE D080       00080        3908=CP4F       NI    COMPFLGS,255-OPERAND   TURN OFF OPERAND FLAG          00147001
0024B4 9529 8000       00000        3909=CP4H       CLI   0(R8),XFDELTA                                         00148001
0024B8 4780 5060              000A8 3910=           BE    COMP                                                  00149001
0024BC 4540 C198              025B4 3911=           BAL   R4,CP4E                                               00150001
0024C0 47F0 C098              024B4 3912=           B     CP4H                                                  00151001
                                    3913=*                                                                      00152001
0024C4 4540 C198              025B4 3914=CP4G       BAL   R4,CP4E                                               00153001
0024C8 D201 C0B6 DA73 024D2 00A73   3915=           MVC   CP4I(2),STRDNAME                                      00154001
0024CE 4520 559E              005E6 3916=           BAL   R2,GENTXT2             GENERATE 4 BYTES               00155001
0024D2 0000                         3917=CP4I       DC    X'0000'                *** GENERATED CODE ***         00156001
0024D4 9200 DAA5       00AA5        3918=           MVI   CBVTAB+45,X'00'                                       00157001
0024D8 9120 DA74       00A74        3919=           TM    STRDNAME+1,X'20'                                      00158001
0024DC 4780 C0DA              024F6 3920=           BZ    CP4J                                                  00159001
0024E0 9280 DAA5       00AA5        3921=           MVI   CBVTAB+45,X'80'                                       00160001
0024E4 D201 DAA6 DA73 00AA6 00A73   3922=           MVC   CBVTAB+46(2),STRDNAME                                 00161001
0024EA 9108 DA74       00A74        3923=           TM    STRDNAME+1,X'08'                                      00162001
0024EE 4780 C0DA              024F6 3924=           BZ    CP4J                                                  00163001
0024F2 92C0 DAA5       00AA5        3925=           MVI   CBVTAB+45,X'C0'                                       00164001
0024F6 D22C DA78 DA7B 00A78 00A7B   3926=CP4J       MVC   CBVTAB(45),CBVTAB+3                                   00165001
0024FC 48F0 DA64              00A64 3927=           LH    R15,HALFW                                             00166001
002500 06F0                         3928=           BCTR  R15,R0                                                00167001
002502 40F0 DA64              00A64 3929=           STH   R15,HALFW                                             00168001
002506 9525 8000       00000        3930=           CLI   0(R8),XFCOMMA                                         00169001
00250A 4780 C0A8              024C4 3931=           BE    CP4G                                                  00170001
00250E 48F0 DA64              00A64 3932=           LH    R15,HALFW                                             00171001
002512 12FF                         3933=           LTR   R15,R15                                               00172001
002514 4780 C104              02520 3934=           BZ    CP4K                                                  00173001
002518 9200 DAA5       00AA5        3935=           MVI   CBVTAB+45,X'00'                                       00174001
00251C 47F0 C0DA              024F6 3936=           B     CP4J                                                  00175001
                                    3937=*                                                                      00176001
002520 48F0 DA64              00A64 3938=CP4K       LH    R15,HALFW                                             00177001
002524 41F0 F001              00001 3939=           LA    R15,1(,R15)                                           00178001
002528 40F0 DA64              00A64 3940=           STH   R15,HALFW                                             00179001
00252C 4BF0 5178              001C0 3941=           SH    R15,KH15                                              00180001
002530 4720 C094              024B0 3942=           BP    CP4F                                                  00181001
002534 9180 DA78       00A78        3943=           TM    CBVTAB,X'80'                                          00182001
002538 4780 C18E              025AA 3944=           BZ    CP4L                                                  00183001
00253C 48F0 DA4A              00A4A 3945=           LH    R15,OPDPBN                                            00184001
002540 89F0 0003              00003 3946=           SLL   R15,3                                                 00185001
002544 40F0 C1E0              025FC 3947=           STH   R15,CP4ZA                                             00186001
002548 40F0 C1E2              025FE 3948=           STH   R15,CP4ZB                                             00187001
00254C 1BFF                         3949=           SR    R15,R15                                               00188001
00254E 9103 9006       00006        3950=           TM    6(R9),X'03'                                           00189001
002552 4780 C13E              0255A 3951=           BZ    CP4M                                                  00190001
002556 41F0 F001              00001 3952=           LA    R15,1(,R15)                                           00191001
00255A 4AF0 DA64              00A64 3953=CP4M       AH    R15,HALFW                                             00192001
00255E 89F0 0003              00003 3954=           SLL   R15,3                                                 00193001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

002562 41F0 F010            00010  3955=            LA    R15,16(,R15)                                              00194001
002566 40F0 C1E6            02602  3956=            STH   R15,CP4N+2                                                00195001
00256A 40F0 C1EC            02608  3957=            STH   R15,CP4ZC                                                 00196001
00256E 40F0 C1D6            025F2  3958=            STH   R15,CP4P+2                                                00197001
002572 41F0 F004            00004  3959=            LA    R15,4(,R15)                                               00198001
002576 40F0 C1DA            025F6  3960=            STH   R15,CP4Q+2                                                00199001
00257A 4120 C1DC            025F8  3961=            LA    R2,CP4R                                                   00200001
00257E 45E0 5588            005D0  3962=            BAL   R14,GENTXTS                                               00201001
002582 000C                        3963=            DC    H'12'                  GENERATE 12 BYTES                  00202001
                                   3964=*                                                                           00203001
002584 9140 DA78      00A78        3965=            TM    CBVTAB,X'40'                                              00204001
002588 4780 C17E            0259A  3966=            BZ    CP4S                                                      00205001
00258C 4120 C1D4            025F0  3967=            LA    R2,CP4P                                                   00206001
002590 45E0 5588            005D0  3968=            BAL   R14,GENTXTS                                               00207001
002594 0008                        3969=            DC    H'8'                   GENERATE 8 BYTES                   00208001
                                   3970=*                                                                           00209001
002596 47F0 C18E            025AA  3971=            B     CP4L                                                      00210001
                                   3972=*                                                                           00211001
00259A D201 C1EE DA79 0260A 00A79  3973=CP4S        MVC   CP4ZF(2),CBVTAB+1                                         00212001
0025A0 4120 C1E8            02604  3974=            LA    R2,CP4T                                                   00213001
0025A4 45E0 5588            005D0  3975=            BAL   R14,GENTXTS                                               00214001
0025A8 0008                        3976=            DC    H'8'                   GENERATE 8 BYTES                   00215001
                                   3977=*                                                                           00216001
0025AA D22C DA78 DA7B 00A78 00A7B  3978=CP4L        MVC   CBVTAB(45),CBVTAB+3                                       00217001
0025B0 47F0 C104            02520  3979=            B     CP4K                                                      00218001
0025B4 5040 D624            00624  3980=CP4E        ST    R4,STRETURN                                               00219001
0025B8 D201 DA76 DA50 00A76 00A50  3981=            MVC   STRDNAME+3(2),ZEROHW                                      00220001
0025BE 952F 8001      00001        3982=CP4V        CLI   1(R8),XFZETA                                              00221001
0025C2 4740 C1C4            025E0  3983=            BL    CP4U                                                      00222001
0025C6 4720 C1B6            025D2  3984=            BH    CP4W                                                      00223001
0025CA 4540 5084            000CC  3985=            BAL   R4,JBUFFER                                                00224001
0025CE 47F0 C1A2            025BE  3986=            B     CP4V                                                      00225001
                                   3987=*                                                                           00226001
0025D2 D204 DA73 8001 00A73 00001  3988=CP4W        MVC   STRDNAME(5),1(R8)                                         00227001
0025D8 4180 8005            00005  3989=            LA    R8,5(,R8)                                                 00228001
0025DC 47F0 C1A2            025BE  3990=            B     CP4V                                                      00229001
                                   3991=*                                                                           00230001
0025E0 4180 8001            00001  3992=CP4U        LA    R8,1(,R8)                                                 00231001
0025E4 58F0 D624            00624  3993=            L     R15,STRETURN                                              00232001
0025E8 07FF                        3994=            BR    R15                                                       00233001
                                   3995=*                                                                           00234001
0025EA 58B0 519C            001E4  3996=CP4B        L     R11,STC                                                   00235001
0025EE 07F5                        3997=            BR    R5                     RETURN TO SUBSTART                 00236001
                                   3998=*                                                                           00237001
0025F0 508A 0000            00000  3999=CP4P        ST    R8,0(R10)              *** GENERATED CODE ***             00238001
0025F4 509A 0000            00000  4000=CP4Q        ST    R9,0(R10)              *** GENERATED CODE ***             00239001
0025F8 45FD 00D4            000D4  4001=CP4R        BAL   R15,CAP1(R13)          *** GENERATED CODE ***             00240001
0025FC 0000                        4002=CP4ZA       DC    X'0000'                *** GENERATED CODE ***             00241001
0025FE 0000                        4003=CP4ZB       DC    X'0000'                *** GENERATED CODE ***             00242001
002600 588A 0000            00000  4004=CP4N        L     R8,0(R10)              *** GENERATED CODE ***             00243001
002604 45FD 0118            00118  4005=CP4T        BAL   R15,VALUCALL(R13)      *** GENERATED CODE ***             00244001
002608 0000                        4006=CP4ZC       DC    X'0000'                *** GENERATED CODE ***             00245001
00260A 0000                        4007=CP4ZF       DC    X'0000'                *** GENERATED CODE ***             00246001
                                   4008=*                                                                           00247001
                                   4009=********************************************************************** 00248001
                                   4010=*                                                                           00249001
                                   4011=*         COMPILER PROGRAM - CP7                                            00250001
                                   4012=*                                                                           00251001
                                   4013=********************************************************************** 00252001
                                   4014=*                                                                           00253001
                  R:C  0260C       4015=            USING CP7,R12                                               00254001
00260C 4540 5E30            00E78  4016=CP7         BAL   R4,MOVEOPTK                                               00255001
002610 920B A000      00000        4017=            MVI   0(R10),X'0B'                                              00256001
002614 47F0 5060            000A8  4018=            B     COMP                                                      00257001
                                   4019=*                                                                           00258001
                                   4020=********************************************************************** 00259001
                                   4021=*                                                                           00260001
                                   4022=*         COMPILER PROGRAM - CP8                                            00261001
                                   4023=*                                                                           00262001
                                   4024=********************************************************************** 00263001
                                   4025=*                                                                           00264001
                  R:C  02618       4026=            USING CP8,R12                                               00265001
002618 9101 D080      00080        4027=CP8         TM    COMPFLGS,OPERAND                                          00266001
00261C 4710 C020            02638  4028=            BO    CP8A                                                      00267001
002620 4540 5E30            00E78  4029=CP8B        BAL   R4,MOVEOPTK                                               00268001
002624 9226 A000      00000        4030=            MVI   0(R10),XFRBRAC                                            00269001
002628 41B0 B266            00266  4031=            LA    R11,614(,R11)                                             00270001
00262C 9180 D080      00080        4032=            TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?                00271001
002630 0715                        4033=            BOR   R5                     YES, RETURN TO SUBSTART            00272001
002632 4540 5706            0074E  4034=            BAL   R4,CLEARRG                                                00273001
002636 07F5                        4035=            BR    R5                     RETURN TO SUBSTART                 00274001
                                   4036=*                                                                           00275001
002638 4540 5318            00360  4037=CP8A        BAL   R4,SERR3                                                  00276001
00263C 00B1                        4038=            DC    H'177'                 ERROR 177                          00277001
                                   4039=*                                                                           00278001
00263E 4190 9005            00005  4040=            LA    R9,5(,R9)                                                 00279001
002642 47F0 C008            02620  4041=            B     CP8B                                                      00280001
                                   4042=*                                                                           00281001
                                   4043=********************************************************************** 00282001
                                   4044=*                                                                           00283001
                                   4045=*         COMPILER PROGRAM - CP16                                           00284001
                                   4046=*                                                                           00285001
                                   4047=********************************************************************** 00286001
                                   4048=*                                                                           00287001
                  R:C  02646       4049=            USING CP16,R12                                              00288001
002646 9101 D080      00080        4050=CP16        TM    COMPFLGS,OPERAND                                          00289001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00264A 4780 C014              0265A  4051=          BZ     CP16A                                             00290001
00264E 4540 5D54              00D9C  4052=          BAL    R4,PLPRST                                         00291001
002652 4199 0005              00005  4053=          LA     R9,5(R9)                                          00292001
002656 94FE D080        00080        4054=          NI     COMPFLGS,255-OPERAND   TURN OFF OPERAND           00293001
00265A 952C 8000        00000        4055=CP16A     CLI    0(R8),XFEND                                       00294001
00265E 4770 C020              02666  4056=          BNE    CP16B                                             00295001
002662 46A0 503C              00084  4057=          BCT    R10,SPECTEST                                      00296001
002666 9180 D080        00080        4058=CP16B     TM     COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?        00297001
00266A 4710 C040              02686  4059=          BO     CP16C                  YES, BRANCH                00298001
00266E 950D A000        00000        4060=          CLI    0(R10),X'0D'                                      00299001
002672 4780 C0A0              026E6  4061=          BE     CP16D                                             00300001
002676 9180 9006        00006        4062=          TM     6(R9),X'80'                                       00301001
00267A 4780 C0B0              026F6  4063=          BZ     CP16E                                             00302001
00267E 4520 55A2              005EA  4064=          BAL    R2,GENTXT4             GENERATE 4 BYTES           00303001
002682 47FD 00E8              000E8  4065=          B      232(R13)               *** GENERATED CODE ***     00304001
                                     4066=*                                                                  00305001
002686 950D A000        00000        4067=CP16C     CLI    0(R10),X'0D'                                      00306001
00268A 4780 C08C              026D2  4068=          BE     CP16F                                             00307001
00268E 9500 8001        00001        4069=          CLI    1(R8),XFPLUS                                      00308001
002692 4780 C068              026AE  4070=          BE     CP16G                                             00309001
002696 9180 D080        00080        4071=          TM     COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?        00310001
00269A 4710 C068              026AE  4072=          BO     CP16G                  YES, BRANCH                00311001
00269E 4540 5CE8              00D30  4073=          BAL    R4,DECOMP                                         00312001
0026A2 4840 DA4E              00A4E  4074=          LH     R4,OPDLN                                          00313001
0026A6 58F0 D61C              0061C  4075=          L      R15,LATAB                                         00314001
0026AA 5064 F000              00000  4076=          ST     R6,0(R4,R15)                                      00315001
0026AE 4199 0005              00005  4077=CP16G     LA     R9,5(R9)                                          00316001
0026B2 4110 0004              00004  4078=          LA     R1,4                                              00317001
0026B6 950F A000        00000        4079=CP16H     CLI    0(R10),X'0F'                                      00318001
0026BA 4770 C07C              026C2  4080=          BNE    CP16I                                             00319001
0026BE 4111 0004              00004  4081=          LA     R1,4(R1)                                          00320001
0026C2 8910 000C              0000C  4082=CP16I     SLL    R1,12                                             00321001
0026C6 4319 0003              00003  4083=          IC     R1,3(R9)                                          00322001
0026CA 8810 0004              00004  4084=          SRL    R1,4                                              00323001
0026CE 4199 0005              00005  4085=          LA     R9,5(R9)                                          00324001
0026D2 48F0 DA5C              00A5C  4086=CP16F     LH     R15,SPBNST                                        00325001
0026D6 89F0 0002              00002  4087=          SLL    R15,2                                             00326001
0026DA 401F D632              00632  4088=          STH    R1,PBTAB3+2(R15)                                  00327001
0026DE 4540 5D14              00D5C  4089=          BAL    R4,PBNHDL                                         00328001
0026E2 46A0 503C              00084  4090=          BCT    R10,SPECTEST                                      00329001
0026E6 4520 55A2              005EA  4091=CP16D     BAL    R2,GENTXT4             GENERATE 4 BYTES           00330001
0026EA 45FD 00EC              000EC  4092=          BAL    R15,EPILOGB(FSA)       *** GENERATED CODE ***     00331001
0026EE 4810 DA50              00A50  4093=          LH     R1,ZEROHW                                         00332001
0026F2 47F0 C08C              026D2  4094=          B      CP16F                                             00333001
                                     4095=*                                                                  00334001
0026F6 4110 0014              00014  4096=CP16E     LA     R1,20                                             00335001
0026FA 4199 0005              00005  4097=          LA     R9,5(R9)                                          00336001
0026FE 47F0 C070              026B6  4098=          B      CP16H                                             00337001
                                     4099=*                                                                  00338001
                                     4100=*********************************************************************** 00339001
                                     4101=*                                                                  00340001
                                     4102=*        COMPILER PROGRAM - CP24                                   00341001
                                     4103=*                                                                  00342001
                                     4104=*********************************************************************** 00343001
                                     4105=*                                                                  00344001
                   R:C  02702        4106=          USING  CP24,R12                                          00345001
002702 9101 D080        00080        4107=CP24      TM     COMPFLGS,OPERAND                                  00346001
002706 4780 C012              02714  4108=          BZ     CP24A                                             00347001
00270A 4540 5318              00360  4109=          BAL    R4,SERR3                                          00348001
00270E 00B1                          4110=          DC     H'177'                 ERROR 177                  00349001
                                     4111=*                                                                  00350001
002710 4190 9005              00005  4112=          LA     R9,5(,R9)                                         00351001
002714 4540 590C              00954  4113=CP24A     BAL    R4,SCHDL                                          00352001
002718 07F5                          4114=          BR     R5                     RETURN TO SUBSTART         00353001
                                     4115=*                                                                  00354001
                                     4116=*********************************************************************** 00355001
                                     4117=*                                                                  00356001
                                     4118=*        COMPILER PROGRAM - CP25                                   00357001
                                     4119=*                                                                  00358001
                                     4120=*********************************************************************** 00359001
                                     4121=*                                                                  00360001
                   R:C  0271A        4122=          USING  CP25,R12                                          00361001
00271A 9101 D080        00080        4123=CP25      TM     COMPFLGS,OPERAND                                  00362001
00271E 4780 C010              0272A  4124=          BZ     CP25A                                             00363001
002722 4540 5D54              00D9C  4125=          BAL    R4,PLPRST                                         00364001
002726 4190 9005              00005  4126=          LA     R9,5(,R9)                                         00365001
00272A 4540 5E30              00E78  4127=CP25A     BAL    R4,MOVEOPTK                                       00366001
00272E D200 A000 8000 00000 00000    4128=          MVC    0(1,R10),0(R8)                                    00367001
002734 4540 590C              00954  4129=          BAL    R4,SCHDL                                          00368001
002738 07F5                          4130=          BR     R5                     RETURN TO SUBSTART         00369001
                                     4131=*                                                                  00370001
                                     4132=*********************************************************************** 00371001
                                     4133=*                                                                  00372001
                                     4134=*        COMPILER PROGRAM - CP36                                   00373001
                                     4135=*                                                                  00374001
                                     4136=*********************************************************************** 00375001
                                     4137=*                                                                  00376001
                   R:C  0273A        4138=          USING  CP36,R12                                          00377001
00273A 4140 C010              0274A  4139=CP36      LA     R4,CP36A                                          00378001
00273E 4530 5F08              00F50  4140=          BAL    R3,OPDTEST                                        00379001
002742 4540 5E44              00E8C  4141=          BAL    R4,TARITHM                                        00380001
002746 47F0 C020              0275A  4142=          B      CP36B                  +00                        00381001
                                     4143=*                                                                  00382001
00274A 4190 9005              00005  4144=CP36A     LA     R9,5(,R9)              +04                        00383001
00274E 4540 5E30              00E78  4145=          BAL    R4,MOVEOPTK                                       00384001
002752 D200 A000 8000 00000 00000    4146=          MVC    0(1,R10),0(R8)                                    00385001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

002758 07F5                          4147=         BR     R5                    RETURN TO SUBSTART          00386001
                                     4148=*                                                                 00387001
00275A 9180 D080        00080        4149=CP36B    TM     COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?         00388001
00275E 4710 C010              0274A  4150=         BO     CP36A                 YES, BRANCH                 00389001
002762 4540 578A              007D2  4151=         BAL    R4,OPDREC                                         00390001
002766 9101 9001        00001        4152=         TM     1(R9),X'01'                                       00391001
00276A 4710 C070              027AA  4153=         BO     CP36C                                             00392001
00276E 4540 5506              0054E  4154=         BAL    R4,TRREIN                                         00393001
002772 D201 C044 9008 0277E 00008    4155=         MVC    CP36D+2(2),8(R9)                                  00394001
002778 4520 55A2              005EA  4156=         BAL    R2,GENTXT4            GENERATE 4 BYTES            00395001
00277C 50EA 0000              00000  4157=CP36D    ST     R14,0(R10)            *** GENERATED CODE ***      00396001
002780 47F0 C05C              02796  4158=         B      CP36E                                             00397001
                                     4159=*                                                                 00398001
002784 1BEE                          4160=CP36F    SR     R14,R14                                           00399001
002786 43E9 0003              00003  4161=         IC     R14,3(R9)                                         00400001
00278A 88E0 0004              00004  4162=         SRL    R14,4                                             00401001
00278E 4540 5B4E              00B96  4163=         BAL    R4,ROUTINE9                                       00402001
002792 4540 5AF2              00B3A  4164=         BAL    R4,ROUTINE8                                       00403001
002796 4A70 DA56              00A56  4165=CP36E    AH     R7,ONEENTRY                                       00404001
00279A 4A70 DA56              00A56  4166=         AH     R7,ONEENTRY                                       00405001
00279E 4070 D5F8              005F8  4167=         STH    R7,WORKPL                                         00406001
0027A2 4540 58BA              00902  4168=         BAL    R4,MAXCH                                          00407001
0027A6 47F0 C010              0274A  4169=         B      CP36A                                             00408001
                                     4170=*                                                                 00409001
0027AA 4130 C04A              02784  4171=CP36C    LA     R3,CP36F                                          00410001
0027AE 4540 5CB4              00CFC  4172=         BAL    R4,ROUTIN15                                       00411001
0027B2 91A0 9000        00000        4173=         TM     0(R9),X'A0'                                       00412001
0027B6 4780 C05C              02796  4174=         BZ     CP36E                                             00413001
0027BA D401 C09E DA54 027D8 00A54    4175=         NC     CP36G+2(2),CLEARDIS   UPDATE GENERATED CODE       00414001
0027C0 D601 C09E 9008 027D8 00008    4176=         OC     CP36G+2(2),8(R9)                                  00415001
0027C6 D201 C0A0 DA6A 027DA 00A6A    4177=         MVC    CP36G+4(2),WPLACE                                 00416001
0027CC D300 C0A0 DA72 027DA 00A72    4178=         MVZ    CP36G+4(1),VPLACE                                 00417001
0027D2 4520 55A6              005EE  4179=         BAL    R2,GENTXT6            GENERATE 6 BYTES            00418001
0027D6 D203 A000 0000 00000 00000    4180=CP36G    MVC    0(4,R10),0            *** GENERATED CODE ***      00419001
0027DC 47F0 C05C              02796  4181=         B      CP36E                                             00420001
                                     4182=*                                                                 00421001
                                     4183=********************************************************************** 00422001
                                     4184=*                                                                 00423001
                                     4185=*        COMPILER PROGRAM - CP38                                  00424001
                                     4186=*                                                                 00425001
                                     4187=********************************************************************** 00426001
                                     4188=*                                                                 00427001
                 R:C  027E0          4189=         USING  CP38,R12                                          00428001
0027E0 4140 C080              02860  4190=CP38     LA     R4,CP38A                                          00429001
0027E4 4530 5F08              00F50  4191=         BAL    R3,OPDTEST                                        00430001
0027E8 4540 5E44              00E8C  4192=         BAL    R4,TARITHM                                        00431001
0027EC 47F0 C010              027F0  4193=         B      CP38B                                             00432001
0027F0 9110 9014        00014        4194=CP38B    TM     20(R9),X'10'                                      00433001
0027F4 4710 C080              02860  4195=         BO     CP38A                                             00434001
0027F8 9108 9015        00015        4196=         TM     21(R9),X'08'                                      00435001
0027FC 4780 C078              02858  4197=         BZ     CP38C                                             00436001
002800 9528 8000        00000        4198=         CLI    0(R8),XFRSQBR                                     00437001
002804 4770 C06C              0284C  4199=         BNE    CP38F                                             00438001
002808 9180 D080        00080        4200=         TM     COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?         00439001
00280C 4780 C188              02968  4201=         BZ     CP38D                 NO, BRANCH                  00440001
002810 47F0 C1C2              029A2  4202=         B      CP38E                                             00441001
                                     4203=*                                                                 00442001
002814 92A0 9014        00014        4204=CP38G    MVI    20(R9),X'A0'                                      00443001
002818 9403 9015        00015        4205=         NI     21(R9),X'03'                                      00444001
00281C 9630 9015        00015        4206=         OI     21(R9),X'30'                                      00445001
002820 4199 0014              00014  4207=CP38H    LA     R9,20(R9)                                         00446001
002824 9601 D080        00080        4208=         OI     COMPFLGS,OPERAND                                  00447001
002828 4BA0 516C              001B4  4209=         SH     R10,KH2                                           00448001
00282C D500 A001 B063 00001 00063    4210=         CLC    1(1,R10),99(R11)                                  00449001
002832 4780 503C              00084  4211=         BE     SPECTEST                                          00450001
002836 41B0 B144              00144  4212=         LA     R11,324(,R11)                                     00451001
00283A D500 A001 B063 00001 00063    4213=         CLC    1(1,R10),99(R11)                                  00452001
002840 4780 503C              00084  4214=         BE     SPECTEST                                          00453001
002844 4BB0 5180              001C8  4215=         SH     R11,KH614                                         00454001
002848 47F0 503C              00084  4216=         B      SPECTEST                                          00455001
                                     4217=*                                                                 00456001
00284C 4540 5380              003C8  4218=CP38F    BAL    R4,SERR1                                          00457001
002850 00B4                          4219=         DC     H'180'                ERROR 180                   00458001
                                     4220=*                                                                 00459001
002852 D204 9014 5182 00014 001CA    4221=         MVC    20(5,R9),API                                      00460001
002858 9180 D080        00080        4222=CP38C    TM     COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?         00461001
00285C 4780 C0F2              028D2  4223=         BZ     CP38J                 NO, BRANCH                  00462001
002860 94BF D080        00080        4224=CP38A    NI     COMPFLGS,255-NLOAD                                00463001
002864 9528 8000        00000        4225=         CLI    0(R8),XFRSQBR                                     00464001
002868 4770 C0BC              0289C  4226=         BNE    CP38K                                             00465001
00286C 9130 9015        00015        4227=         TM     21(R9),X'30'                                      00466001
002870 4740 C21A              029FA  4228=         BM     CP38L                                             00467001
002874 D500 9012 9011 00012 00011    4229=         CLC    18(1,R9),17(R9)                                   00468001
00287A 4770 C0AA              0288A  4230=         BNE    CP38M                                             00469001
00287E 9180 D080        00080        4231=         TM     COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?         00470001
002882 4780 C23A              02A1A  4232=         BZ     CP38N                 NO, BRANCH                  00471001
002886 47F0 C034              02814  4233=         B      CP38G                                             00472001
                                     4234=*                                                                 00473001
00288A 9110 9014        00014        4235=CP38M    TM     20(R9),X'10'                                      00474001
00288E 4710 C040              02820  4236=         BO     CP38H                                             00475001
002892 4540 5380              003C8  4237=         BAL    R4,SERR1                                          00476001
002896 00B3                          4238=         DC     H'179'                ERROR 179                   00477001
                                     4239=*                                                                 00478001
002898 47F0 C034              02814  4240=         B      CP38G                                             00479001
                                     4241=*                                                                 00480001
00289C 4190 9005              00005  4242=CP38K    LA     R9,5(,R9)                                         00481001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                         X390 3.1.04  2012/08/17 13.13

0028A0 1BB11                        4243=        SR     R1,R1                                                      00482001
0028A2 4310 900D             0000D  4244=        IC     R1,13(,R9)                                                 00483001
0028A6 4110 1001             00001  4245=        LA     R1,1(,R1)                                                  00484001
0028AA 4210 900D             0000D  4246=        STC    R1,13(,R9)                                                 00485001
0028AE 9180 D080       00080        4247=        TM     COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?                00486001
0028B2 0715                         4248=        BOR    R5                      YES, RETURN TO SUBSTART            00487001
0028B4 9501 900E       0000E        4249=        CLI    14(R9),X'01'                                               00488001
0028B8 0775                         4250=        BNER   R5                      NO, BRANCH TO SUBSTART             00489001
0028BA D201 D5F8 9003 005F8 00003   4251=        MVC    WORKPL(2),3(R9)                                            00490001
0028C0 4800 D5F8             005F8  4252=        LH     R0,WORKPL                                                  00491001
0028C4 8900 100F             0000F  4253=        SLL    R0,15(R1)                                                  00492001
0028C8 1200                         4254=        LTR    R0,R0                                                      00493001
0028CA 07B5                         4255=        BNMR   R5                      NO, BRANCH TO SUBSTART             00494001
0028CC 9640 D080       00080        4256=        OI     COMPFLGS,SUBSCOPT                                          00495001
0028D0 07F5                         4257=        BR     R5                      RETURN TO SUBSTART                 00496001
                                    4258=*                                                                         00497001
0028D2 9140 D080       00080        4259=CP38J   TM     COMPFLGS,SUBSCOPT                                          00498001
0028D6 4710 C0FE             028DE  4260=        BO     CP38O                                                      00499001
0028DA 4540 C2EC             02ACC  4261=        BAL    R4,CP38P                                                   00500001
0028DE 9130 9015       00015        4262=CP38O   TM     21(R9),X'30'                                               00501001
0028E2 4199 0014             00014  4263=        LA     R9,20(R9)                                                  00502001
0028E6 4740 C112             028F2  4264=        BM     CP38Q                                                      00503001
0028EA 4540 593C             00984  4265=        BAL    R4,ROUTINE1                                                00504001
0028EE 47F0 C126             02906  4266=        B      CP38R                                                      00505001
                                    4267=*                                                                         00506001
0028F2 4540 59F2             00A3A  4268=CP38Q   BAL    R4,ROUTINE3                                                00507001
0028F6 4A70 DA56             00A56  4269=        AH     R7,ONEENTRY                                                00508001
0028FA 9201 DA46       00A46        4270=        MVI    RII,X'01'                                                  00509001
0028FE 5090 D5E0             005E0  4271=        ST     R9,RUTI+32                                                 00510001
002902 92A8 9000       00000        4272=        MVI    0(R9),X'A8'                                                00511001
002906 4B90 517A             001C2  4273=CP38R   SH     R9,KH20                                                    00512001
00290A 1B11                         4274=        SR     R1,R1                                                      00513001
00290C 4319 0010             00010  4275=        IC     R1,16(R9)                                                  00514001
002910 4111 0004             00004  4276=        LA     R1,4(R1)                                                   00515001
002914 4219 0010             00010  4277=        STC    R1,16(R9)                                                  00516001
002918 9140 D080       00080        4278=        TM     COMPFLGS,SUBSCOPT                                          00517001
00291C 4710 C080             02860  4279=        BO     CP38A                                                      00518001
002920 4A10 DA6A             00A6A  4280=        AH     R1,WPLACE                                                  00519001
002924 4010 C154             02934  4281=        STH    R1,CP38S+2              UPDATE GENERATED CODE              00520001
002928 D100 C153 DA72 02933 00A72   4282=        MVN    CP38S+1(1),VPLACE                                          00521001
00292E 4520 55A2             005EA  4283=        BAL    R2,GENTXT4              GENERATE 4 BYTES                   00522001
002932 5CE0 0000             00000  4284=CP38S   M      R14,0                   *** GENERATED CODE ***             00523001
002936 9140 900A       0000A        4285=        TM     10(R9),X'40'                                               00524001
00293A 4710 C16E             0294E  4286=        BO     CP38T                                                      00525001
00293E D300 C169 900D 02949 0000D   4287=        MVZ    CP38U+1(1),13(R9)                                          00526001
002944 4520 559E             005E6  4288=        BAL    R2,GENTXT2              GENERATE 2 BYTES                   00527001
002948 1A0F                         4289=CP38U   AR     R0,R15                  *** GENERATED CODE ***             00528001
00294A 47F0 C080             02860  4290=        B      CP38A                                                      00529001
                                    4291=*                                                                         00530001
00294E D201 C342 900D 02B22 0000D   4292=CP38T   MVC    CP38V+2(2),13(R9)                                          00531001
002954 D201 C346 900D 02B26 0000D   4293=        MVC    CP38W+2(2),13(R9)                                          00532001
00295A 4120 C340             02B20  4294=        LA     R2,CP38V                                                   00533001
00295E 45E0 5588             005D0  4295=        BAL    R14,GENTXTS                                                00534001
002962 0008                         4296=        DC     H'8'                    GENERATE 8 BYTES                   00535001
                                    4297=*                                                                         00536001
002964 47F0 C080             02860  4298=        B      CP38A                                                      00537001
                                    4299=*                                                                         00538001
002968 4540 C2EC             02ACC  4300=CP38D   BAL    R4,CP38P                                                   00539001
00296C 4540 5706             0074E  4301=        BAL    R4,CLEARRG                                                 00540001
002970 9130 9015       00015        4302=        TM     21(R9),X'30'                                               00541001
002974 4740 C1DA             029BA  4303=        BM     CP38X                                                      00542001
002978 1B11                         4304=        SR     R1,R1                                                      00543001
00297A 4319 0016             00016  4305=        IC     R1,22(R9)                                                  00544001
00297E 8910 0003             00003  4306=        SLL    R1,3                                                       00545001
002982 4010 C34A             02B2A  4307=        STH    R1,CP38AA+2             UPDATE GENERATED CODE              00546001
002986 D201 C34E 9017 02B2E 00017   4308=        MVC    CP38AB+2(2),23(R9)                                         00547001
00298C 940F C34E       02B2E        4309=        NI     CP38AB+2,X'0F'                                             00548001
002990 4120 C348             02B28  4310=        LA     R2,CP38AA                                                  00549001
002994 45E0 5588             005D0  4311=        BAL    R14,GENTXTS                                                00550001
002998 000C                         4312=        DC     H'12'                   GENERATE 12 BYTES                  00551001
                                    4313=*                                                                         00552001
00299A 4A70 DA56             00A56  4314=        AH     R7,ONEENTRY                                                00553001
00299E 9601 DA46       00A46        4315=        OI     RII,X'01'                                                  00554001
0029A2 D201 9014 C36E 00014 02B4E   4316=CP38E   MVC    20(2,R9),CP38YA                                            00555001
0029A8 4070 DA5E             00A5E  4317=        STH    R7,SPBNST+2                                                00556001
0029AC 9680 DA5E       00A5E        4318=        OI     SPBNST+2,X'80'                                             00557001
0029B0 D202 9016 DA5D 00016 00A5D   4319=        MVC    22(3,R9),SPBNST+1                                          00558001
0029B6 47F0 C040             02820  4320=        B      CP38H                                                      00559001
                                    4321=*                                                                         00560001
0029BA 1817                         4322=CP38X   LR     R1,R7                                                      00561001
0029BC 4A10 DA56             00A56  4323=        AH     R1,ONEENTRY                                                00562001
0029C0 4010 C1F6             029D6  4324=        STH    R1,CP38AC+2             UPDATE GENERATED CODE              00563001
0029C4 4010 C20A             029EA  4325=        STH    R1,CP38AD+2                                                00564001
0029C8 4010 D5F8             005F8  4326=        STH    R1,WORKPL                                                  00565001
0029CC 4540 58BA             00902  4327=        BAL    R4,MAXCH                                                   00566001
0029D0 4520 55A2             005EA  4328=        BAL    R2,GENTXT4              GENERATE 4 BYTES                   00567001
0029D4 50FA 0000             00000  4329=CP38AC  ST     R15,0(R10)              *** GENERATED CODE ***             00568001
0029D8 4199 0014             00014  4330=        LA     R9,20(R9)                                                  00569001
0029DC 4540 578A             007D2  4331=        BAL    R4,OPDREC                                                  00570001
0029E0 4B90 517A             001C2  4332=        SH     R9,KH20                                                    00571001
0029E4 4520 55A2             005EA  4333=        BAL    R2,GENTXT4              GENERATE 4 BYTES                   00572001
0029E8 58FA 0000             00000  4334=CP38AD  L      R15,0(R10)              *** GENERATED CODE ***             00573001
0029EC 4120 C350             02B30  4335=        LA     R2,CP38AE                                                  00574001
0029F0 45E0 5588             005D0  4336=        BAL    R14,GENTXTS                                                00575001
0029F4 0004                         4337=        DC     H'4'                    GENERATE 4 BYTES                   00576001
                                    4338=*                                                                         00577001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0029F6 47F0 C1C2              029A2  4339=        B     CP38E                                               00578001
                                     4340=*                                                                 00579001
0029FA 9180 D080        00080        4341=CP38L   TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?          00580001
0029FE 4710 C034              02814  4342=        BO    CP38G                   YES, BRANCH                  00581001
002A02 D200 C367 9012 02B47 00012    4343=        MVC   CP38AF+1(1),18(R9)                                   00582001
002A08 4120 C366              02B46  4344=        LA    R2,CP38AF                                            00583001
002A0C 45E0 5588              005D0  4345=        BAL   R14,GENTXTS                                          00584001
002A10 0008                          4346=        DC    H'8'                    GENERATE 8 BYTES             00585001
                                     4347=*                                                                 00586001
002A12 4B70 DA56              00A56  4348=        SH    R7,ONEENTRY                                          00587001
002A16 9200 DA46        00A46        4349=        MVI   RII,X'00'                                            00588001
002A1A 4810 DA6A              00A6A  4350=CP38N   LH    R1,WPLACE                                            00589001
002A1E 4111 0008              00008  4351=        LA    R1,8(R1)                                             00590001
002A22 4010 C356              02B36  4352=        STH   R1,CP38AG+2             UPDATE GENERATED CODE        00591001
002A26 4111 0004              00004  4353=        LA    R1,4(R1)                                             00592001
002A2A 4010 C35E              02B3E  4354=        STH   R1,CP38AI+2                                          00593001
002A2E D300 DA72 900D 00A72 0000D    4355=        MVZ   VPLACE(1),13(R9)                                     00594001
002A34 9140 900A        0000A        4356=        TM    10(R9),X'40'                                         00595001
002A38 4780 C262              02A42  4357=        BZ    CP38AHA                                              00596001
002A3C D300 DA72 C33B 00A72 02B1B    4358=        MVZ   VPLACE(1),CP38AH+1                                   00597001
002A42 D200 C355 DA72 02B35 00A72    4359=CP38AHA MVC   CP38AG+1(1),VPLACE      UPDATE GENERATED CODE        00598001
002A48 D200 C35D DA72 02B3D 00A72    4360=        MVC   CP38AI+1(1),VPLACE                                   00599001
002A4E 4710 C2CC              02AAC  4361=        BO    CP38AL                                               00600001
002A52 9180 C355        02B35        4362=        TM    CP38AG+1,X'80'                                       00601001
002A56 4710 C2C4              02AA4  4363=        BO    CP38AK                                               00602001
002A5A 4540 5AF2              00B3A  4364=        BAL   R4,ROUTINE8                                          00603001
002A5E 4A70 DA56              00A56  4365=        AH    R7,ONEENTRY                                          00604001
002A62 1BEE                          4366=        SR    R14,R14                                              00605001
002A64 43E9 000D              0000D  4367=        IC    R14,13(R9)                                           00606001
002A68 88E0 0004              00004  4368=        SRL   R14,4                                                00607001
002A6C 9101 DA46        00A46        4369=        TM    RII,X'01'                                            00608001
002A70 4780 C29C              02A7C  4370=        BZ    CP38AM                                               00609001
002A74 4540 5B4E              00B96  4371=        BAL   R4,ROUTINE9                                          00610001
002A78 47F0 C2CC              02AAC  4372=        B     CP38AL                                               00611001
                                     4373=*                                                                 00612001
002A7C 9601 DA46        00A46        4374=CP38AM  OI    RII,X'01'                                            00613001
002A80 41EE 0080              00080  4375=        LA    R14,128(R14)                                         00614001
002A84 42E0 C365              02B45  4376=        STC   R14,CP38AN+1                                         00615001
002A88 9104 D082        00082        4377=        TM    COMPFLGS+2,NOTEST                                    00616001
002A8C 4780 C2BA              02A9A  4378=        BZ    CP38AO                                               00617001
002A90 42E0 C2B9              02A99  4379=        STC   R14,CP38AP+1                                         00618001
002A94 4520 559E              005E6  4380=        BAL   R2,GENTXT2              GENERATE 2 BYTES             00619001
002A98 1800                          4381=CP38AP  LR    R0,R0                   *** GENERATED CODE ***       00620001
002A9A 9212 C2DD        02ABD        4382=CP38AO  MVI   CP38YB+1,X'12'          UPDATE GENERATED CODE        00621001
002A9E D300 900D C365 0000D 02B45    4383=        MVZ   13(1,R9),CP38AN+1                                    00622001
002AA4 4119 0014              00014  4384=CP38AK  LA    R1,20(R9)                                            00623001
002AA8 5010 D5E0              005E0  4385=        ST    R1,RUTI+32                                           00624001
002AAC 4120 C354              02B34  4386=CP38AL  LA    R2,CP38AG                                            00625001
002AB0 9104 D082        00082        4387=        TM    COMPFLGS+2,NOTEST                                    00626001
002AB4 4710 C2DE              02ABE  4388=        BO    CP38BA                                               00627001
002AB8 45E0 5588              005D0  4389=        BAL   R14,GENTXTS                                          00628001
002ABC 0010                          4390=CP38YB  DC    H'16'                   GENERATE 16 BYTES            00629001
                                     4391=*                                                                 00630001
002ABE 9210 C2DD        02ABD        4392=CP38BA  MVI   CP38YB+1,X'10'                                       00631001
002AC2 D204 9014 900A 00014 0000A    4393=        MVC   20(5,R9),10(R9)                                      00632001
002AC8 47F0 C040              02820  4394=        B     CP38H                                                00633001
                                     4395=*                                                                 00634001
002ACC 5040 C370              02B50  4396=CP38P   ST    R4,CP38YD                                            00635001
002AD0 4540 578A              007D2  4397=        BAL   R4,OPDREC                                            00636001
002AD4 9101 9001        00001        4398=        TM    1(R9),X'01'                                          00637001
002AD8 4710 C30C              02AEC  4399=        BO    CP38YE                                               00638001
002ADC 4540 5506              0054E  4400=        BAL   R4,TRREIN                                            00639001
002AE0 4520 559E              005E6  4401=        BAL   R2,GENTXT2              GENERATE 2 BYTES             00640001
002AE4 18FE                          4402=        LR    R15,R14                 *** GENERATED CODE ***       00641001
002AE6 5840 C370              02B50  4403=CP38YF  L     R4,CP38YD                                            00642001
002AEA 07F4                          4404=        BR    R4                                                   00643001
                                     4405=*                                                                 00644001
002AEC 4130 C32C              02B0C  4406=CP38YE  LA    R3,CP38YG                                            00645001
002AF0 4540 5CB4              00CFC  4407=        BAL   R4,ROUTIN15                                          00646001
002AF4 D201 C326 DA6A 02B06 00A6A    4408=        MVC   CP38YH+2(2),WPLACE                                   00647001
002AFA D100 C325 DA72 02B05 00A72    4409=        MVN   CP38YH+1(1),VPLACE                                   00648001
002B00 4520 55A2              005EA  4410=        BAL   R2,GENTXT4                                           00649001
002B04 58F0 0000              00000  4411=CP38YH  L     R15,0                   *** GENERATED CODE ***       00650001
002B08 47F0 C306              02AE6  4412=        B     CP38YF                                               00651001
                                     4413=*                                                                 00652001
002B0C 4540 5AF2              00B3A  4414=CP38YG  BAL   R4,ROUTINE8                                          00653001
002B10 D100 C33B DA72 02B1B 00A72    4415=        MVN   CP38AH+1(1),VPLACE                                   00654001
002B16 4520 559E              005E6  4416=        BAL   R2,GENTXT2              GENERATE 2 BYTES             00655001
002B1A 18F0                          4417=CP38AH  LR    R15,R0                  *** GENERATED CODE ***       00656001
002B1C 47F0 C306              02AE6  4418=        B     CP38YF                                               00657001
                                     4419=*                                                                 00658001
002B20 5AFA 0000              00000  4420=CP38V   A     R15,0(R10)              *** GENERATED CODE ***       00659001
002B24 50FA 0000              00000  4421=CP38W   ST    R15,0(R10)              *** GENERATED CODE ***       00660001
002B28 589B 0000              00000  4422=CP38AA  L     R9,0(R11)               *** GENERATED CODE ***       00661001
002B2C 588C 0000              00000  4423=CP38AB  L     R8,0(R12)               *** GENERATED CODE ***       00662001
002B30 45ED 00F4              000F4  4424=CP38AE  BAL   R14,244(R13)            *** GENERATED CODE ***       00663001
002B34 59F0 0000              00000  4425=CP38AG  C     R15,0                   *** GENERATED CODE ***       00664001
002B38 474D 020C              0020C  4426=        BL    524(R13)                *** GENERATED CODE ***       00665001
002B3C 59F0 0000              00000  4427=CP38AI  C     R15,0                   *** GENERATED CODE ***       00666001
002B40 47BD 020C              0020C  4428=        BNL   524(R13)                *** GENERATED CODE ***       00667001
002B44 1800                          4429=CP38AN  LR    R0,R0                   *** GENERATED CODE ***       00668001
002B46 9500 8000        00000        4430=CP38AF  CLI   0(R8),0                 *** GENERATED CODE ***       00669001
002B4A 477D 0218              00218  4431=        BNE   536(R13)                *** GENERATED CODE ***       00670001
002B4E A038                          4432=CP38YA  DC    X'A038'                                              00671001
002B50 00000000                      4433=CP38YD  DC    F'0'                    R4 SAVEAREA                  00672001
                                     4434=*                                                                 00673001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                        X390 3.1.04  2012/08/17 13.13

                                    4435=********************************************************************** 00674001
                                    4436=*                                                                      00675001
                                    4437=*        COMPILER PROGRAM - CP41                                       00676001
                                    4438=*                                                                      00677001
                                    4439=********************************************************************** 00678001
                                    4440=*                                                                      00679001
                 R:C  02B54         4441=         USING  CP41,R12                                               00680001
002B54 4140 C010            02B64   4442=CP41     LA     R4,CP41A                                               00681001
002B58 4530 5F08            00F50   4443=         BAL    R3,OPDTEST                                             00682001
002B5C 9104 9001      00001         4444=         TM     1(R9),X'04'                                            00683001
002B60 4780 C070            02BC4   4445=         BZ     CP41B                                                  00684001
002B64 D200 C04F A000 02BA3 00000   4446=CP41A    MVC    CP41C+1(1),0(R10)                                      00685001
002B6A 4540 5E30            00E78   4447=         BAL    R4,MOVEOPTK                                            00686001
002B6E D200 A000 B063 00000 00063   4448=         MVC    0(1,R10),99(R11)                                       00687001
002B74 58B0 5194            001DC   4449=         L      R11,DECAADD                                            00688001
002B78 41B0 B122            00122   4450=         LA     R11,290(,R11)                                          00689001
002B7C 4B90 5178            001C0   4451=         SH     R9,KH15                                                00690001
002B80 4540 5E30            00E78   4452=         BAL    R4,MOVEOPTK                                            00691001
002B84 D200 A000 8000 00000 00000   4453=         MVC    0(1,R10),0(R8)                                         00692001
002B8A 9110 900F      0000F         4454=         TM     15(R9),X'10'                                           00693001
002B8E 4710 C07A            02BCE   4455=         BO     CP41D                                                  00694001
002B92 9108 9010      00010         4456=         TM     16(R9),X'08'                                           00695001
002B96 4780 C07A            02BCE   4457=         BZ     CP41D                                                  00696001
002B9A 4110 0006            00006   4458=         LA     R1,6                                                   00697001
002B9E 4121 C1D3            02D27   4459=CP41E    LA     R2,CP41Z-1(R1)                                         00698001
002BA2 9500 2000      00000         4460=CP41C    CLI    0(R2),0               UPDATED INSTRUCTION              00699001
002BA6 0785                         4461=         BER    R5                    ZERO, BRANCH TO SUBSTART         00700001
002BA8 4610 C04A            02B9E   4462=         BCT    R1,CP41E                                               00701001
002BAC 4540 5380            003C8   4463=         BAL    R4,SERR1                                               00702001
002BB0 00B5                         4464=         DC     H'181'                ERROR 181                        00703001
                                    4465=*                                                                      00704001
002BB2 D204 900F 5182 0000F 001CA   4466=         MVC    15(5,R9),API                                           00705001
002BB8 07F5                         4467=         BR     R5                    RETURN TO SUBSTART               00706001
                                    4468=*                                                                      00707001
002BBA D204 9000 5182 00000 001CA   4469=CP41G    MVC    0(5,R9),API                                            00708001
002BC0 47F0 C010            02B64   4470=         B      CP41A                                                  00709001
                                    4471=*                                                                      00710001
002BC4 4540 5318            00360   4472=CP41B    BAL    R4,SERR3                                               00711001
002BC8 00B8                         4473=         DC     H'184'                ERROR 184                        00712001
                                    4474=*                                                                      00713001
002BCA 47F0 C066            02BBA   4475=         B      CP41G                                                  00714001
                                    4476=*                                                                      00715001
002BCE 9200 9005      00005         4477=CP41D    MVI    5(R9),X'00'                                            00716001
002BD2 D208 9006 9005 00006 00005   4478=         MVC    6(9,R9),5(R9)                                          00717001
002BD8 9201 900D      0000D         4479=         MVI    13(R9),X'01'                                           00718001
002BDC 1B11                         4480=         SR     R1,R1                                                  00719001
002BDE 4310 9012            00012   4481=         IC     R1,18(,R9)                                             00720001
002BE2 8810 0004            00004   4482=         SRL    R1,4                                                   00721001
002BE6 4110 1001            00001   4483=         LA     R1,1(,R1)                                              00722001
002BEA 4219 000C            0000C   4484=         STC    R1,12(R9)                                              00723001
002BEE 940F 9012      00012         4485=         NI     18(R9),X'0F'                                           00724001
002BF2 9180 D080      00080         4486=         TM     COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?              00725001
002BF6 0715                         4487=         BOR    R5                    YES, RETURN TO SUBSTART          00726001
002BF8 9210 900B      0000B         4488=         MVI    11(R9),X'10'                                           00727001
002BFC 9130 9010      00010         4489=         TM     16(R9),X'30'                                           00728001
002C00 47B0 C0C8            02C1C   4490=         BNM    CP41H                                                  00729001
002C04 4A70 DA56            00A56   4491=         AH     R7,ONEENTRY                                            00730001
002C08 4190 900F            0000F   4492=         LA     R9,15(,R9)                                             00731001
002C0C 4540 578A            007D2   4493=         BAL    R4,OPDREC                                              00732001
002C10 4B90 5178            001C0   4494=         SH     R9,KH15                                                00733001
002C14 4B70 DA56            00A56   4495=         SH     R7,ONEENTRY                                            00734001
002C18 4B70 DA56            00A56   4496=         SH     R7,ONEENTRY                                            00735001
002C1C 9101 DA46      00A46         4497=CP41H    TM     RII,X'01'                                              00736001
002C20 4710 C0E0            02C34   4498=         BO     CP41I                                                  00737001
002C24 41E0 0008            00008   4499=         LA     R14,8                                                  00738001
002C28 4A70 DA56            00A56   4500=         AH     R7,ONEENTRY                                            00739001
002C2C 9601 DA46      00A46         4501=         OI     RII,X'01'                                              00740001
002C30 47F0 C0E4            02C38   4502=         B      CP41J                                                  00741001
                                    4503=*                                                                      00742001
002C34 4540 5AB0            00AF8   4504=CP41I    BAL    R4,ROUTINE7                                            00743001
002C38 4129 0005            00005   4505=CP41J    LA     R2,5(R9)                                               00744001
002C3C 89E0 0002            00002   4506=         SLL    R14,2                                                  00745001
002C40 502E D5C0            005C0   4507=         ST     R2,RUTI(R14)                                           00746001
002C44 89E0 0002            00002   4508=         SLL    R14,2                                                  00747001
002C48 42E0 C1CF            02D23   4509=         STC    R14,CP41K+1           UPDATE GENERATED INSTRUCTION     00748001
002C4C 4070 DA5E            00A5E   4510=         STH    R7,SPBNST+2                                            00749001
002C50 D300 DA5E C1CF 00A5E 02D23   4511=         MVZ    SPBNST+2(1),CP41K+1   UPDATE GENERATED INSTRUCTION     00750001
002C56 D202 9007 DA5D 00007 00A5D   4512=         MVC    7(3,R9),SPBNST+1                                       00751001
002C5C D201 9005 C1E2 00005 02D36   4513=         MVC    5(2,R9),CP41L                                          00752001
002C62 D400 9006 9010 00006 00010   4514=         NC     6(1,R9),16(R9)                                         00753001
002C68 9630 9006      00006         4515=         OI     6(R9),X'30'                                            00754001
002C6C 9130 9010      00010         4516=         TM     16(R9),X'30'                                           00755001
002C70 4740 C1C0            02D14   4517=         BM     CP41M                                                  00756001
002C74 4130 DA9F            00A9F   4518=         LA     R3,CBVTAB+39                                           00757001
002C78 1818                         4519=         LR     R1,R8                                                  00758001
002C7A 5B10 D600            00600   4520=         S      R1,SOURCEB                                             00759001
002C7E 4010 DA5A            00A5A   4521=         STH    R1,NUMBBL+1                                            00760001
002C82 4133 0009            00009   4522=CP41P    LA     R3,9(R3)                                               00761001
002C86 5930 D620            00620   4523=         C      R3,SUTABCA                                             00762001
002C8A 47D0 C156            02CAA   4524=         BNH    CP41N                                                  00763001
002C8E 5090 C1DC            02D30   4525=         ST     R9,CP41Q                                               00764001
002C92 4190 900F            0000F   4526=         LA     R9,15(,R9)                                             00765001
002C96 4540 593C            00984   4527=         BAL    R4,ROUTINE1                                            00766001
002C9A 4110 0004            00004   4528=         LA     R1,4                                                   00767001
002C9E 4A10 DA6A            00A6A   4529=         AH     R1,WPLACE                                              00768001
002CA2 4010 DA6A            00A6A   4530=         STH    R1,WPLACE                                              00769001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

002CA6 47F0 C1AC            02D00  4531=         B      CP41S                                                   00770001
                                   4532=*                                                                       00771001
002CAA D502 3001 DA59 00001 00A59  4533=CP41N    CLC    1(3,R3),NUMBBL                                          00772001
002CB0 4770 C12E            02C82  4534=         BNE    CP41P                                                   00773001
002CB4 D204 9000 3004 00000 00004  4535=         MVC    0(5,R9),4(R3)                                           00774001
002CBA 9201 900E      0000E        4536=         MVI    14(R9),X'01'                                            00775001
002CBE 9180 9003      00003        4537=         TM     3(R9),X'80'                                             00776001
002CC2 4780 C176            02CCA  4538=         BZ     CP41R                                                   00777001
002CC6 9640 D080      00080        4539=         OI     COMPFLGS,SUBSCOPT                                       00778001
002CCA D202 D5F9 9000 005F9 00000  4540=CP41R    MVC    WORKPL+1(3),0(R9)                                       00779001
002CD0 5810 D5F8            005F8  4541=         L      R1,WORKPL                                               00780001
002CD4 9140 1000      00000        4542=         TM     0(R1),X'40'                                             00781001
002CD8 4710 C1A2            02CF6  4543=         BO     CP41U                                                   00782001
002CDC 4311 0003            00003  4544=         IC     R1,3(R1)                                                00783001
002CE0 8A10 0004            00004  4545=         SRA    R1,4                                                    00784001
002CE4 4210 C19F            02CF3  4546=         STC    R1,CP41V+1                                              00785001
002CE8 D300 C19F C1CF 02CF3 02D23  4547=         MVZ    CP41V+1(1),CP41K+1      UPDATE GENERATED INSTRUCTION    00786001
002CEE 4520 559E            005E6  4548=         BAL    R2,GENTXT2              GENERATE 2 BYTES                00787001
002CF2 1800                        4549=CP41V    LR     R0,R0                   *** GENERATED CODE ***          00788001
002CF4 07F5                        4550=         BR     R5                      RETURN TO SUBSTART              00789001
                                   4551=*                                                                       00790001
002CF6 5090 C1DC            02D30  4552=CP41U    ST     R9,CP41Q                                                00791001
002CFA 1891                        4553=         LR     R9,R1                                                   00792001
002CFC 4540 593C            00984  4554=         BAL    R4,ROUTINE1                                             00793001
002D00 5890 C1DC            02D30  4555=CP41S    L      R9,CP41Q                                                00794001
002D04 D201 C1D0 DA6A 02D24 00A6A  4556=         MVC    CP41K+2(2),WPLACE                                       00795001
002D0A D300 C1D0 DA72 02D24 00A72  4557=         MVZ    CP41K+2(1),VPLACE                                       00796001
002D10 47F0 C1CA            02D1E  4558=         B      CP41X                                                   00797001
                                   4559=*                                                                       00798001
002D14 4A70 DA56            00A56  4560=CP41M    AH     R7,ONEENTRY                                             00799001
002D18 D201 C1D0 C1E0 02D24 02D34  4561=         MVC    CP41K+2(2),CP41W        UPDATE GENERATED CODE           00800001
002D1E 4520 55A2            005EA  4562=CP41X    BAL    R2,GENTXT4              GENERATE 4 BYTES                00801001
002D22 5800 0000            00000  4563=CP41K    L      R0,0                    *** GENERATED CODE ***          00802001
002D26 07F5                        4564=         BR     R5                      RETURN TO SUBSTART              00803001
                                   4565=*                                                                       00804001
002D28 1E1F2E170629                4566=CP41Z    DC     X'1E1F2E170629'                                         00805001
002D2E 0000
002D30 00000000                    4567=CP41Q    DC     F'0'                    SAVE AREA FOR R9                00806001
002D34 8004                        4568=CP41W    DC     X'8004'                 CODE UPDATES                    00807001
002D36 A003                        4569=CP41L    DC     X'A003'                 CODE UPDATES                    00808001
                                   4570=*                                                                       00809001
                                   4571=*********************************************************************** 00810001
                                   4572=*                                                                       00811001
                                   4573=*        END OF SOURCE RECOVERED FROM DISASMBLY                         00812001
                                   4574=*                                                                       00813001
                                   4575=*********************************************************************** 00814001
                                   4576=*                                                                       00815001
                                   4577          COPY  IEX50003                 IEX50003 CONTINUATION           01933001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    4579=*                                                               00002001
                                    4580=*********************************************************************** 00003001
                                    4581=*                                                               00004001
                                    4582=*        COMPILER PROGRAM - CP51                                00005001
                                    4583=*                                                               00006001
                                    4584=*********************************************************************** 00007001
                                    4585=*                                                               00008001
                                    4586=*   UPPER BOUND HANDLING                                        00009001
                                    4587=*        CONTEXT                  STATEMENT                     00010001
                                    4588=*        SOURCE OPERATOR          COMMA, RIGHT BRACKET          00011001
                                    4589=*        STACK OPERATOR                                         00012001
                                    4590=*        OPERANDS                 UPPER BOUNDARY                00013001
                                    4591=*                                 LOWER BOUNDARY IN STACK       00014001
                                    4592=*                                 ARRAY IDENTIFIER              00015001
                                    4593=*                                                               00016001
                                    4594=*        BIT PATTERNS                                           00017001
                                    4595=*                                                               00018001
                      00003         4596=BOOTYPEM EQU   X'03'                   BOOLEAN TYPE MASK        00019001
                      00002         4597=REALTYPM EQU   X'02'                   REAL TYPE                00020001
                                    4598=*                                                               00021001
                  R:C  02D38        4599=         USING CP51,R12                                         00022001
002D38 4140 C010            02D48   4600=CP51     LA    R4,EQD2                 RETURN IF OPERAND MISSING 00023001
002D3C 4530 5F08            00F50   4601=         BAL   R3,OPDTEST              OPERAND TEST             00024001
002D40 4540 5E44            00E8C   4602=         BAL   R4,TARITHM              OPERAND ARITHMETIC ?     00025001
002D44 47F0 C068            02DA0   4603=         B     EQD1                    +00 ARITHMETIC           00026001
                                    4604=*                                                               00027001
002D48 4190 9005            00005   4605=EQD2     LA    R9,5(,R9)               +04 CLOPD                00028001
002D4C 9528 8000      00000         4606=EQD3     CLI   0(R8),XFRSQBR           RIGHT SQUARE BRACKET ?   00029001
002D50 4780 C01E            02D56   4607=         BE    EQD4                    YES, BRANCH              00030001
002D54 06A5                         4608=         BCTR  R10,R5                  CLOPT SUBSTART           00031001
002D56 4190 900A            0000A   4609=EQD4     LA    R9,10(,R9)              CLEAR TWO OPERANDS       00032001
002D5A 4BA0 516C            001B4   4610=         SH    R10,KH2                 CLEAR TWO OPERATORS      00033001
002D5E D201 D5F6 9000 005F6 00000   4611=         MVC   KONSUM,0(R9)            R9,= R9+C(R9)            00034001
002D64 4A90 D5F6            005F6   4612=         AH    R9,KONSUM               REMOVE STACKED ARRAY IDENTIFIER 00035001
002D68 4190 9005            00005   4613=ETB3     LA    R9,5(,R9)               CLOPD                    00036001
002D6C 94FE D080      00080         4614=         NI    COMPFLGS,255-OPERAND    RESET OPERAND            00037001
002D70 952F 8001      00001         4615=ETE3     CLI   1(R8),XFZETA            R8+1 = ZETA ?            00038001
002D74 D201 5190 DA50 001D8 00A50   4616=         MVC   GREGN(2),ZEROHW         CLEAR COUNTER            00039001
002D7A 4740 C052            02D8A   4617=         BL    ETF2                    LOW, OPERATOR            00040001
002D7E 4720 C060            02D98   4618=         BH    ETF4                    HIGH, OPERAND            00041001
002D82 4540 5084            000CC   4619=         BAL   R4,JBUFFER              ZETA, CHANGE BUFFER      00042001
002D86 47F0 C038            02D70   4620=         B     ETE3                                           00043001
                                    4621=*                                                               00044001
002D8A 4180 8001            00001   4622=ETF2     LA    R8,1(,R8)               INCR R8                  00045001
002D8E 9525 8000      00000         4623=         CLI   0(R8),XFCOMMA           COMMA ?                  00046001
002D92 4770 5060            000A8   4624=         BNE   COMP                    NO, BRANCH               00047001
002D96 07F5                         4625=ETH2     BR    R5                      RETURN TO SUBSTART       00048001
                                    4626=*                                                               00049001
002D98 4540 5380            003C8   4627=ETF4     BAL   R4,SERR1                                       00050001
002D9C 00BF                         4628=         DC    H'191'                  ERROR 191                00051001
002D9E 07F5                         4629=         BR    R5                      RETURN TO SUBSTART       00052001
                                    4630=*                                                               00053001
002DA0 9180 D080      00080         4631=EQD1     TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?      00054001
002DA4 4710 C010            02D48   4632=         BO    EQD2                    YES, BRANCH              00055001
002DA8 4540 578A            007D2   4633=         BAL   R4,OPDREC               OPERAND RECOGNIZER       00056001
002DAC 9101 9001      00001         4634=         TM    1(R9),X'01'             OPERAND INTEGER          00057001
002DB0 4710 C0A8            02DE0   4635=         BO    EQG1                    YES                      00058001
002DB4 4540 5506            0054E   4636=         BAL   R4,TRREIN               GENERATE A CALL TO CONVERSION 00059001
                                    4637=*                                      REAL INTEGER             00060001
002DB8 4A70 DA56            00A56   4638=         AH    R7,ONEENTRY             RESERVE PLACE FOR OPERAND 00061001
002DBC 4070 D5F8            005F8   4639=         STH   R7,WORKPL                                      00062001
002DC0 4540 58BA            00902   4640=         BAL   R4,MAXCH                CHECK MAX                00063001
002DC4 4070 C096            02DCE   4641=         STH   R7,EQF2+2               INSERT DISPL IN STORE INSTRUCT 00064001
002DC8 4520 55A2            005EA   4642=         BAL   R2,GENTXT4              GENERATE 4 BYTES         00065001
002DCC 50EA 0000            00000   4643=EQF2     ST    R14,0(CDSA,0)           *** GENERATED CODE ***   00066001
002DD0 D201 9000 C2FE 00000 03036   4644=         MVC   0(2,R9),INTEGTYP        INTERNAL NAME, INTEGER IN STACK 00067001
002DD6 4070 DA5E            00A5E   4645=         STH   R7,SPBNST+2                                    00068001
002DDA D202 9002 DA5D 00002 00A5D   4646=         MVC   2(3,R9),SPBNST+1                               00069001
002DE0 4540 5E38            00E80   4647=EQG1     BAL   R4,MOVEOPDK             RESERVE ONE OPDK ENTRY   00070001
002DE4 D204 9000 900A 00000 0000A   4648=         MVC   0(5,R9),10(R9)          MOVE LOWER BOUNDRY       00071001
002DEA 92C0 900A      0000A         4649=         MVI   10(R9),X'C0'            ITAB IDENTIFIER          00072001
002DEE 9231 900B      0000B         4650=         MVI   11(R9),X'31'            INTEGER VARIABLE         00073001
002DF2 D200 900C DA5D 0000C 00A5D   4651=         MVC   12(1,R9),SPBNST+1       CURRENT PBN AND LAST     00074001
002DF8 D201 900D DA66 0000D 00A66   4652=         MVC   13(2,R9),USPEI2         ENTRY IN SMF TO OPERAND  00075001
002DFE D201 A000 C276 00000 02FAE   4653=         MVC   0(2,R10),FORMINUS       FOR.= AND - TO OPERATOR STACK 00076001
002E04 4540 5E30            00E78   4654=         BAL   R4,MOVEOPTK             RESERVE ONE OPTK ENTRY   00077001
002E08 5080 C280            02FB8   4655=         ST    R8,HHSOURCE             SAVE SOURCE POINTER      00078001
002E0C 4180 C278            02FB0   4656=         LA    R8,HTRICK               SET R8 TO HTRICK         00079001
002E10 41B0 B144            00144   4657=         LA    R11,324(,R11)           SWITCH TO EXPRESSION CONTEXT 00080001
002E14 5810 C284            02FBC   4658=         L     R1,ADDHZB1                                     00081001
002E18 58C0 52B8            00300   4659=         L     R12,SCPTAB+4*69         R12 -> CP69              00082001
002E1C 07F1                         4660=         BR    R1                      BRANCH TO CP 69          00083001
                                    4661=*                                                               00084001
                                    4662=*        RETURN FROM CP20 AFTER ASSIGNMENT OF UPPER-LOWER       00085001
                                    4663=*        BOUNDRY+1 TO SMF                                       00086001
                                    4664=*                                                               00087001
002E1E 5880 C280            02FB8   4665=DERE2    L     R8,HHSOURCE             RESET R8                 00088001
002E22 9104 D082      00082         4666=         TM    COMPFLGS+2,NOTEST                              00089001
002E26 4710 C0FA            02E32   4667=         BO    ERE2                    NO ARRAY BOUND TEST GENERATED 00090001
                                    4668=*                                      TEST FOR ARRAY BOUNDRY ERROR 00091001
002E2A 4520 55A2            005EA   4669=         BAL   R2,GENTXT4              GENERATE 4 BYTES         00092001
002E2E 47D0 D208            00208   4670=         BNH   ARRAYBD(,FSA)           *** GENERATED CODE ***   00093001
002E32 4810 DA66            00A66   4671=ERE2     LH    R1,USPEI2               COMPUTE AND              00094001
002E36 4110 1004            00004   4672=         LA    R1,4(,R1)               STORE NEXT ENTRY IN      00095001
002E3A 4010 DA66            00A66   4673=         STH   R1,USPEI2               SMF IN USPEI2            00096001
002E3E 9525 8000      00000         4674=         CLI   0(R8),XFCOMMA           MORE BOUND PAIRS LEFT IN ARRAY? 00097001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

002E42 4770 C128             02E60  4675=         BNE   ERE3               NO                           00098001
002E46 D201 9000 C2FE 00000 03036  4676=         MVC   0(2,R9),INTEGTYP   OPERAND INTEGER VALUE        00099001
002E4C 4A70 DA56             00A56  4677=         AH    R7,ONEENTRY                                     00100001
002E50 4070 DA5E             00A5E  4678=         STH   R7,SPBNST+2        CURRENT PBN AND NEXT OBJECT  00101001
002E54 D202 9002 DA5D 00002 00A5D  4679=         MVC   2(3,R9),SPBNST+1   TIME STACK DISPLACEMENT TO   00102001
002E5A 4B70 DA56             00A56  4680=         SH    R7,ONEENTRY        OPERAND IN STACK             00103001
002E5E 07F5                         4681=         BR    R5                 SCAN TO NEXT OPERATOR        00104001
                                    4682=*                                                              00105001
                                    4683=*        LAST BOUND PAIR IN THIS ARRAY                         00106001
                                    4684=*                                                              00107001
002E60 4190 9005             00005  4685=ERE3     LA    R9,5(,R9)          REMOVE ONE OPERAND           00108001
002E64 9201 C153       02E8B        4686=         MVI   ERJ4+3,X'01'       DETERMINE AND INSERT         00109001
002E68 9103 9001       00001        4687=         TM    1(R9),BOOTYPEM     Z=8,4 OR 1 INTO              00110001
002E6C 4710 C14A             02E82  4688=         BO    ERJ41              LOAD                         00111001
002E70 D201 C152 DA56 02E8A 00A56  4689=         MVC   ERJ4+2(2),ONEENTRY GPRA                         00112001
002E76 9102 9001       00001        4690=         TM    1(R9),REALTYPM     INSTRUCTION                  00113001
002E7A 4710 C14A             02E82  4691=         BO    ERJ41                                           00114001
002E7E 9204 C153       02E8B        4692=         MVI   ERJ4+3,X'04'       UPDATE GENERATED CODE        00115001
002E82 4520 55A6             005EE  4693=ERJ41    BAL   R2,GENTXT6         GENERATE 6 BYTES             00116001
                                    4694=*                                 *** GENERATED CODE ***       00117001
002E86 1B66                         4695=         SR    GPRC,GPRC          CLEAR REG                    00118001
002E88 4130 0000             00000  4696=ERJ4     LA    GPRA,0(0,0)        LOAD GPRA INSTRUCTION        00119001
                                    4697=*                                 *** GENERATED CODE ***       00120001
002E8C 1B11                         4698=         SR    R1,R1              CALCULATE                    00121001
002E8E 4310 DA69             00A69  4699=         IC    R1,USPEI4+1        LENGTH OF SMF P-PART         00122001
002E92 4210 C267             02F9F  4700=         STC   R1,ESE4+1          NUMBER OF SUBSCRIPTS TO CODE 00123001
002E96 4110 1001             00001  4701=         LA    R1,1(,R1)                                       00124001
002E9A 8910 0002             00002  4702=         SLL   R1,2               INSERT                       00125001
002E9E 0610                         4703=         BCTR  R1,0               IN CODE FOR COPY OF          00126001
002EA0 4210 C233             02F6B  4704=         STC   R1,ESF4+1          SMF                          00127001
002EA4 4810 DA66             00A66  4705=ESB1     LH    R1,USPEI2                                       00128001
002EA8 4010 C186             02EBE  4706=         STH   R1,ESD1+2          DISP IN SMF TO INSTRUCTION   00129001
002EAC 4B10 516E             001B6  4707=         SH    R1,KH4             NEXT ENTRY IN SMF            00130001
002EB0 4010 DA66             00A66  4708=         STH   R1,USPEI2          CALCULATED DOWNWARDS         00131001
002EB4 4010 C274             02FAC  4709=         STH   R1,ESK1+2          INSERT IN CODE               00132001
002EB8 4520 55A2             005EA  4710=         BAL   R2,GENTXT4         GENERATE 4 BYTES             00133001
002EBC 503A 0000             00000  4711=ESD1     ST    GPRA,0(CDSA,0)     *** GEN CODE *** STORE OF P(4) 00134001
002EC0 4810 DA68             00A68  4712=         LH    R1,USPEI4          REDUCE DIMENSION             00135001
002EC4 0610                         4713=         BCTR  R1,0               COUNT                        00136001
002EC6 1211                         4714=         LTR   R1,R1              CODE FOR LAST ENTRY P(1) GEN ? 00137001
002EC8 4740 C1AE             02EE6  4715=         BL    ESC2               YES                          00138001
002ECC 4010 DA68             00A68  4716=         STH   R1,USPEI4          STORE DIMENSION VALUE        00139001
002ED0 4070 C26E             02FA6  4717=         STH   R7,ESH1+2          INSERT DISPL OF LOWER BOUND  00140001
002ED4 4B70 DA56             00A56  4718=         SH    R7,ONEENTRY        RELEASE OBJECT TIME STACK    00141001
002ED8 4120 C26A             02FA2  4719=         LA    R2,ESE1            GENERATE CODE FOR            00142001
002EDC 45E0 5588             005D0  4720=         BAL   R14,GENTXTS        DETERMINE OF SMF             00143001
002EE0 000C                         4721=         DC    H'12'              GENERATE 12 BYTES            00144001
                                    4722=*                                                              00145001
002EE2 47F0 C16C             02EA4  4723=         B     ESB1               CONTINUE TO NEXT ENTRY IN SMF 00146001
                                    4724=*                                                              00147001
002EE6 4190 9005             00005  4725=ESC2     LA    R9,5(,R9)          REMOVE ARRAY IDENTIFIER      00148001
002EEA 06A0                         4726=         BCTR  R10,0              REMOVE ARRAY OPERATOR        00149001
002EEC D201 DA68 9000 00A68 00000  4727=         MVC   USPEI4(2),0(R9)    NUMBER OF PREVIOUSLY         00150001
                                    4728=*                                 STACKED ARRAY IDENT TO WORKAR 00151001
002EF2 48E0 DA66             00A66  4729=ESE21    LH    R14,USPEI2                                      00152001
002EF6 40E0 C256             02F8E  4730=ESE22    STH   R14,ESE3+2         SMF DISPL FOR LAST ELEMENT+1 00153001
002EFA 4BE0 516E             001B6  4731=         SH    R14,KH4                                         00154001
002EFE 40E0 C248             02F80  4732=         STH   R14,ESJ2+2         SMF DISPL FOR FIRST ELEMENT  00155001
002F02 4BE0 516E             001B6  4733=         SH    R14,KH4                                         00156001
002F06 40E0 C250             02F88  4734=         STH   R14,ESC3+2         SMF DISPL FOR ZERO ELEMENT   00157001
002F0A 4BE0 516E             001B6  4735=         SH    R14,KH4            SMF DISPL FOR START OF SMF   00158001
002F0E 40E0 C260             02F98  4736=         STH   R14,ESE5+8         TO CODE                      00159001
002F12 40E0 C25A             02F92  4737=         STH   R14,ESE5+2                                      00160001
002F16 D300 C25A C25C 02F92 02F94  4738=         MVZ   ESE5+2(1),ESE5+4                                00161001
002F1C D201 C268 C25A 02FA0 02F92  4739=         MVC   ESE4+2(2),ESE5+2                                00162001
002F22 4120 C240             02F78  4740=         LA    R2,ESE2            GENERATE CODE FOR RESERVATION 00163001
002F26 45E0 5588             005D0  4741=         BAL   R14,GENTXTS        OF MAIN STORAGE FOR ARRAY    00164001
002F2A 002A                         4742=         DC    Y(ESE4-ESE2+4)     LENGTH OF GENERATED CODE     00165001
                                    4743=*                                 STACKED ARRAY IDENT TO WORKAREA 00166001
002F2C 4810 DA68             00A68  4744=         LH    R1,USPEI4          ANY ARRAY IDENT WITH SAME    00167001
002F30 4B10 5170             001B8  4745=         SH    R1,KH5             DIMENSIONS LEFT IN STACK ?   00168001
002F34 4740 C030             02D68  4746=         BM    ETB3               NO                           00169001
002F38 4010 DA68             00A68  4747=         STH   R1,USPEI4          SAVE NUMBER OF ARRAYS LEFT   00170001
002F3C 4190 9005             00005  4748=         LA    R9,5(,R9)          CLEAR OPERAND                00171001
002F40 D401 C236 DA54 02F6E 00A54  4749=         NC    ESF4+4(2),CLEARDIS SMF+16 OF ORIGINAL ARRAY     00172001
002F46 D601 C236 C186 02F6E 02EBE  4750=         OC    ESF4+4(2),ESD1+2   INSERTED AS DISPLACEMENT     00173001
002F4C D201 D5F8 9003 005F8 00003  4751=         MVC   WORKPL(2),3(R9)                                 00174001
002F52 940F D5F8       005F8        4752=         NI    WORKPL,X'0F'                                    00175001
002F56 4810 D5F8             005F8  4753=         LH    R1,WORKPL                                       00176001
002F5A 41E0 1010             00010  4754=         LA    R14,16(,R1)                                     00177001
002F5E 40E0 C234             02F6C  4755=         STH   R14,ESF4+2         NEW SMF DISP +16             00178001
002F62 96A0 C234       02F6C        4756=         OI    ESF4+2,CDSA*16     REGISTER CDSA TO CODE        00179001
002F66 4520 55A6             005EE  4757=         BAL   R2,GENTXT6         GENERATE 6 BYTES             00180001
002F6A D200 A000 A000 00000 00000  4758=ESF4     MVC   0(0,CDSA),0(CDSA)  *** GENERATED CODE ***       00181001
002F70 4BE0 516E             001B6  4759=         SH    R14,KH4            NEW USPEI4 TO R1=SMF-DISP+12 00182001
002F74 47F0 C1BE             02EF6  4760=         B     ESE22                                           00183001
                                    4761=*                                                              00184001
                                    4762=*        CODE FOR RESERVATION OF MAIN STORAGE FOR ARRAY        00185001
                                    4763=*                                                              00186001
002F78 1803                         4764=ESE2     LR    0,GPRA           * *** GENERATED CODE ***       00187001
002F7A 458D 0114             00114  4765=         BAL   ADR,GETMSTO(FSA) | CALL GETMAIN ROUTINE IN FSA  00188001
002F7E 501A 0000             00000  4766=ESJ2     ST    1,0(CDSA,0)      |                              00189001
002F82 18E1                         4767=         LR    R14,1            |                              00190001
002F84 1B16                         4768=         SR    1,GPRC           |                              00191001
002F86 501A 0000             00000  4769=ESC3     ST    1,0(CDSA,0)      |                              00192001
002F8A 1AE3                         4770=         AR    R14,GPRA         |                              00193001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

002F8C 50EA 0000              00000  4771=ESE3      ST    R14,0(CDSA,0)       |                                 00194001
002F90 D203 A000 A00C 00000 0000C  4772=ESE5      MVC   0(4,CDSA),12(CDSA)  |  MOVE CHAINING ADDR              00195001
002F96 4180 0000              00000  4773=          LA    ADR,0(0)            |  STORE DISPL OF LAST SMF         00196001
002F9A 508A 000C              0000C  4774=          ST    ADR,12(CDSA)        |  IN DSA                          00197001
002F9E 9200 A000        00000        4775=ESE4      MVI   0(CDSA),0           |  NUMBER OF SUBSCRIPTS TO SMF     00198001
002FA2 1853                          4776=ESE1      LR    GPRB,GPRA           |  CODE FOR DETERMINE OF           00199001
002FA4 5C4A 0000              00000  4777=ESH1      M     GPRB-1,0(CDSA,0)    |  SMF                             00200001
002FA8 1A65                          4778=          AR    GPRC,GPRB           |                                  00201001
002FAA 5C2A 0000              00000  4779=ESK1      M     GPRA-1,0(CDSA,0)    V                                  00202001
                                     4780=*                                                                     00203001
                                     4781=*         CONSTANTS AND VARIABLES                                     00204001
                                     4782=*                                                                     00205001
002FAE 2D01                          4783=FORMINUS DC    X'2D01'                FOR := AND - OPERATORS          00206001
002FB0 00                            4784=HTRICK   DC    X'00'                  +                               00207001
002FB1 C801000004                    4785=         DC    X'C801000004'          1 AS INTEGER CONSTANT           00208001
002FB6 1C                            4786=         DC    X'1C'                  DO                              00209001
002FB7 00
002FB8 00000000                      4787=HHSOURCE DC    F'0'                   SAVE AREA FOR R8                00210001
002FBC 000058C4                      4788=ADDHZB1  DC    A(DHZB1)               ADDR IN CP 69                   00211001
                                     4789=*                                                                     00212001
                                     4790=********************************************************************** 00213001
                                     4791=*                                                                     00214001
                                     4792=*         COMPILER PROGRAM  - CP52                                    00215001
                                     4793=*                                                                     00216001
                                     4794=********************************************************************** 00217001
                                     4795=*                                                                     00218001
                                     4796=*    ARRAY DECLARATION, BEGINNING                                     00219001
                                     4797=*         CONTEXT             STATEMENT                               00220001
                                     4798=*         SOURCE OPERATOR     LEFT BRACKET, COMMA                     00221001
                                     4799=*         STACK OPERATOR      ARRAY                                   00222001
                                     4800=*         OPERAND             ARRAY IDENTIFIER                        00223001
                                     4801=*                                                                     00224001
                  R:C  02FC0         4802=          USING CP52,R12                                              00225001
002FC0 9525 8000        00000        4803=CP52      CLI   0(R8),XFCOMMA          COMMA ?                         00226001
002FC4 4770 C016              02FD6  4804=          BNE   EWF1                   NO,LAST ARRAY IDENTIFIER        00227001
002FC8 48E0 5190              001D8  4805=          LH    R14,GREGN                                              00228001
002FCC 41EE 0005              00005  4806=          LA    R14,5(R14)             COUNT ARRAY IDENTIFIERS         00229001
002FD0 40E0 5190              001D8  4807=          STH   R14,GREGN                                              00230001
002FD4 07F5                          4808=          BR    R5                     RETURN TO SUBSTART              00231001
                                     4809=*                                                                     00232001
002FD6 4540 5E30              00E78  4810=EWF1      BAL   R4,MOVEOPTK            RESERVE ONE OPTK ENTRY          00233001
002FDA 922C A000        00000        4811=          MVI   0(R10),X'2C'           OPTH (SPEC BRACKET)             00234001
002FDE 4B90 5176              001BE  4812=          SH    R9,KH10                R9 IS DECREASED BY TEN          00235001
002FE2 19A9                          4813=          CR    R10,R9                 CHECK OVERFLOW                  00236001
002FE4 47B0 53E0              00428  4814=          BNL   STACKOFL                                               00237001
002FE8 D204 9005 900A 00005 0000A  4815=          MVC   5(5,R9),10(R9)         MOVE ARRAY IDENTIFIER           00238001
002FEE D201 900A 5190 0000A 001D8  4816=          MVC   10(2,R9),GREGN         NUMBER OF ARRAY IDENTIFIERS-1   00239001
                                     4817=*                                  TO OPERAND STACK                00240001
                                     4818=*                                                                     00241001
                                     4819=*         CALCULATE AND SAVE NUMBER OF SUBSCRIPTS IN USPE14           00242001
                                     4820=*                                                                     00243001
002FF4 1B11                          4821=          SR    R1,R1                                                  00244001
002FF6 4319 0008              00008  4822=          IC    R1,8(R9)                                               00245001
002FFA 8810 0004              00004  4823=          SRL   R1,4                                                   00246001
002FFE 4111 0001              00001  4824=          LA    R1,1(R1)                                               00247001
003002 4010 DA68              00A68  4825=          STH   R1,USPEI4                                              00248001
                                     4826=*                                                                     00249001
                                     4827=*         CALCULATE AND SAVE SMF DISPL +16 IN USPE12                  00250001
                                     4828=*                                                                     00251001
003006 D201 DA66 9008 00A66 00008  4829=          MVC   USPEI2(2),8(R9)                                        00252001
00300C 940F DA66        00A66        4830=          NI    USPEI2,X'0F'                                           00253001
003010 4810 DA66              00A66  4831=          LH    R1,USPEI2                                              00254001
003014 4111 0010              00010  4832=          LA    R1,16(R1)                                              00255001
003018 4010 DA66              00A66  4833=          STH   R1,USPEI2                                              00256001
00301C D201 9000 C076 00000 03036  4834=          MVC   0(2,R9),INTEGTYP       OPERAND INTEGER VALUE IN STACK  00257001
003022 4A70 DA56              00A56  4835=          AH    R7,ONEENTRY            NEXT OBJECT TIME ENTRY          00258001
003026 4070 DA5E              00A5E  4836=          STH   R7,SPBNST+2            CURRENT PBN AND                 00259001
00302A D202 9002 DA5D 00002 00A5D  4837=          MVC   2(3,R9),SPBNST+1       DISPL TO OPERAND STACK          00260001
003030 4B70 DA56              00A56  4838=          SH    R7,ONEENTRY            RELEASE OBJECT TIME STACK       00261001
003034 07F5                          4839=          BR    R5                     SCAN TO NEXT OPERATOR (SUBSTART) 00262001
                                     4840=*                                                                     00263001
                                     4841=*         CONSTANTS AND VARIABLES                                     00264001
                                     4842=*                                                                     00265001
003036 4031                          4843=INTEGTYP DC    X'4031'                INTEGER TYPE VARIABLE           00266001
                                     4844=*                                                                     00267001
                                     4845=********************************************************************** 00268001
                                     4846=*                                                                     00269001
                                     4847=*         COMPILER PROGRAM - CP54                                     00270001
                                     4848=*                                                                     00271001
                                     4849=********************************************************************** 00272001
                                     4850=*                                                                     00273001
                                     4851=*    ARRAY DECLARATION, TERMINATION                                   00274001
                                     4852=*         CONTEXT             STATEMENT                               00275001
                                     4853=*         SOURCE OPERATOR     DELTA                                   00276001
                                     4854=*         STACK OPERATOR      ARRAY                                   00277001
                                     4855=*         OPERAND             NONE                                    00278001
                                     4856=*                                                                     00279001
                  R:C  03038         4857=          USING CP54,R12                                              00280001
003038 9101 D080        00080        4858=CP54      TM    COMPFLGS,OPERAND        OPDT                           00281001
00303C 4710 C014              0304C  4859=          BO    FAC2                    YES, BRANCH                    00282001
003040 06A0                          4860=FAE2      BCTR  R10,0                   CLOPT                          00283001
003042 4540 590C              00954  4861=          BAL   R4,SCHDL                SEMICOLON HANDLING             00284001
003046 4BB0 517C              001C4  4862=          SH    R11,KH290               SWITCH TO PROGRAM CONTEXT      00285001
00304A 07F5                          4863=          BR    R5                      RETURN TO SUBSTART             00286001
                                     4864=*                                                                     00287001
00304C 4540 5304              0034C  4865=FAC2      BAL   R4,SERR4                                               00288001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

003050 00A4                        4866=         DC    H'164'                ERROR 164                       00289001
003052 4190 9005            00005  4867=         LA    R9,5(,R9)             CLOPD                           00290001
003056 47F0 C008            03040  4868=         B     FAE2                                                  00291001
                                   4869=*                                                                    00292001
                                   4870=*********************************************************************** 00293001
                                   4871=*                                                                    00294001
                                   4872=*        COMPILER PROGRAM - CP56                                     00295001
                                   4873=*                                                                    00296001
                                   4874=*********************************************************************** 00297001
                                   4875=*                                                                    00298001
                                   4876=*   DESIGNATIONAL EXPRESSIONS                                        00299001
                                   4877=*        CONTEXT              STATEMENT                              00300001
                                   4878=*        SOURCE OPERATOR      (                                      00301001
                                   4879=*        STACK OPERATOR       GOTO, SWITCH =                         00302001
                                   4880=*        OPERAND              NONE                                   00303001
                                   4881=*                                                                    00304001
                 R:C  0305A        4882=         USING CP56,R12                                              00305001
00305A 9101 D080      00080        4883=CP56     TM    COMPFLGS,OPERAND     OPDT                             00306001
00305E 4710 C018            03072  4884=         BO    FEB2                                                  00307001
003062 41B0 B144            00144  4885=FEC1     LA    R11,324(,R11)        CSW(EXP)                         00308001
003066 4540 5E30            00E78  4886=         BAL   R4,MOVEOPTK          OPTH(SOURCE)                     00309001
00306A D200 A000 8000 00000 00000  4887=         MVC   0(1,R10),0(R8)                                        00310001
003070 07F5                        4888=         BR    R5                   RETURN TO SUBSTART               00311001
                                   4889=*                                                                    00312001
003072 4540 5304            0034C  4890=FEB2     BAL   R4,SERR4                                              00313001
003076 00A4                        4891=         DC    H'164'               ERROR 164                        00314001
003078 4190 9005            00005  4892=         LA    R9,5(,R9)            CLOPD                            00315001
00307C 94FE D080      00080        4893=         NI    COMPFLGS,255-OPERAND RESET OPERAND                    00316001
003080 47F0 C008            03062  4894=         B     FEC1                                                  00317001
                                   4895=*                                                                    00318001
                                   4896=*********************************************************************** 00319001
                                   4897=*                                                                    00320001
                                   4898=*        COMPILER PROGRAM - CP59                                     00321001
                                   4899=*                                                                    00322001
                                   4900=*********************************************************************** 00323001
                                   4901=*                                                                    00324001
                                   4902=*   SWITCH LIST HANDLING                                             00325001
                                   4903=*        CONTEXT              STATEMENT                              00326001
                                   4904=*        SOURCE OPERATOR      COMMA, DELTA                           00327001
                                   4905=*        STACK OPERATOR       SWITCH =                               00328001
                                   4906=*        OPERANDS             DESIGNATIONAL OPERAND (NTH PARAMETER)  00329001
                                   4907=*                             PARAMETERCOUNT AND PRPOINT (N-1 ENTRIES) 00330001
                                   4908=*                             SWITCH IDENTIFIER                      00331001
                                   4909=*                             LABEL OPERAND                          00332001
                                   4910=*                                                                    00333001
                 R:C  03084        4911=         USING CP59,R12                                              00334001
003084 4140 C082            03106  4912=CP59     LA    R4,FKJ2              RETURN IF OPERAND MISSING        00335001
003088 4530 5F08            00F50  4913=         BAL   R3,OPDTEST           OPERAND TEST                     00336001
00308C 9108 9001      00001        4914=         TM    1(R9),X'08'          OPERAND A LABEL ?                00337001
003090 4780 C168            031EC  4915=         BZ    FKC2                 NO, BRANCH TO ERROR 175          00338001
003094 9110 9000      00000        4916=         TM    0(R9),APIMASK                                         00339001
003098 4710 C082            03106  4917=         BO    FKJ2                                                  00340001
00309C 9104 9001      00001        4918=         TM    1(R9),X'04'          SWITCH IDENTIFIER ?              00341001
0030A0 4710 C168            031EC  4919=         BO    FKC2                 YES, ERROR                       00342001
0030A4 9180 D080      00080        4920=         TM    COMPFLGS,COMPMODE    SYNTAX CHECK MODE ?              00343001
0030A8 4710 C082            03106  4921=         BO    FKJ2                 YES, BRANCH                      00344001
0030AC 4540 578A            007D2  4922=         BAL   R4,OPDREC            OPERAND RECOGNIZER               00345001
0030B0 9180 9003      00003        4923=         TM    3(R9),ADR*16         DESIGNATIONAL EXPRESSION ?       00346001
0030B4 4710 C154            031D8  4924=         BO    FKH2                 YES, BRANCH                      00347001
                                   4925=*                                                                    00348001
                                   4926=*        GENERATE LLC (LOAD LABEL COMMON)                            00349001
                                   4927=*                                                                    00350001
0030B8 D100 C046 9003 030CA 00003  4928=         MVN   FKG15+2(1),3(R9)                                      00351001
0030BE D200 C047 9004 030CB 00004  4929=         MVC   FKG15+3(1),4(R9)                                      00352001
0030C4 4520 55A2            005EA  4930=         BAL   R2,GENTXT4           GENERATE 4 BYTES                 00353001
0030C8 588C 0000            00000  4931=FKG15    L     ADR,0(LAT)           *** GENERATED CODE ***           00354001
0030CC 1BFF                        4932=         SR    R15,R15                                               00355001
0030CE 43F0 9002            00002  4933=         IC    R15,2(,R9)                                            00356001
0030D2 49F0 DA5C            00A5C  4934=         CH    R15,SPBNST           CURRENT BLOCK ?                  00357001
0030D6 4770 C060            030E4  4935=         BNE   FKG14                NO                               00358001
0030DA 4520 559E            005E6  4936=         BAL   R2,GENTXT2           GENERATE 2 BYTES                 00359001
                                   4937=*                                   LOAD GDSA WITH CDSA              00360001
0030DE 189A                        4938=         LR    GDSA,CDSA            *** GENERATED CODE ***           00361001
0030E0 47F0 C070            030F4  4939=         B     FKH1                                                  00362001
                                   4940=*                                                                    00363001
0030E4 89F0 0003            00003  4941=FKG14    SLL   R15,3                                                 00364001
0030E8 40F0 C06E            030F2  4942=         STH   R15,FKG16+2                                           00365001
0030EC 4520 55A2            005EA  4943=         BAL   R2,GENTXT4           GENERATE 4 BYTES                 00366001
0030F0 589B 0000            00000  4944=FKG16    L     GDSA,0(PBT)          *** GENERATED CODE ***           00367001
0030F4 4520 55A2            005EA  4945=FKH1     BAL   R2,GENTXT4           GENERATE 4 BYTES                 00368001
                                   4946=*                                   GENERATE BRANCH TO CSWE ROUTINE  00369001
0030F8 47FD 00F8            000F8  4947=         B     CSWE2(FSA)           *** GENERATED CODE ***           00370001
                                   4948=*                                                                    00371001
0030FC 5060 D5F8            005F8  4949=         ST    R6,WORKPL            NEXT THUNK ADDR                  00372001
003100 D202 9002 D5F9 00002 005F9  4950=         MVC   2(3,R9),WORKPL+1     TO OPERAND STCK                  00373001
003106 43F0 9006            00006  4951=FKJ2     IC    R15,6(,R9)                                            00374001
00310A 41F0 F005            00005  4952=         LA    R15,5(,R15)          UPDATE SLSWE                     00375001
00310E 42F0 9001            00001  4953=         STC   R15,1(,R9)            STORE IN STACK                  00376001
003112 9200 9000      00000        4954=         MVI   0(R9),0                                               00377001
003116 9529 8000      00000        4955=         CLI   0(R8),XFDELTA        OPERATOR DELTA ?                 00378001
00311A 0775                        4956=         BNER  R5                   NO, BRANCH TO SUBSTART           00379001
00311C 1BFF                        4957=FKF3     SR    R15,R15                                               00380001
00311E 43F0 9001            00001  4958=         IC    R15,1(,R9)           R15 = NR OF ELEMENTS * 5         00381001
003122 41FF 9005            00005  4959=         LA    R15,5(R15,R9)        R15 POINTS AT SWITCH ID          00382001
003126 50F0 D5F8            005F8  4960=         ST    R15,WORKPL                                            00383001
00312A 50F0 C178            031FC  4961=         ST    R15,STENTRY                                           00384001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00312E D201 DA64 F003 00A64 00003  4962=         MVC   HALFW,3(R15)            GET                      00385001
003134 48E0 DA64            00A64  4963=         LH    R14,HALFW                   LABEL                00386001
003138 54E0 5198            001E0  4964=         N     R14,HEXFFF                        NUMBER         00387001
00313C 5AE0 D61C            0061C  4965=         A     R14,LATAB               GET LAT ENTRY OF SWITCH  00388001
003140 5060 E000            00000  4966=         ST    R6,0(,R14)              STORE PRPOINT IN LAT     00389001
003144 1B11                        4967=FKF41    SR    R1,R1                                            00390001
003146 4310 F003            00003  4968=         IC    R1,3(,R15)              GET                      00391001
00314A 8810 0004            00004  4969=         SRL   R1,4                        ELEMENT              00392001
00314E 4110 1001            00001  4970=         LA    R1,1(,R1)                            COUNT       00393001
003152 4010 C0EA            0316E  4971=         STH   R1,FKF42+2              STORE IN GENERATED CODE  00394001
003156 9102 E003      00003        4972=         TM    3(R14),X'02'            LIST ON WORD BOUNDRY ?   00395001
00315A 4780 C0E4            03168  4973=         BZ    FKF42A                  YES                      00396001
00315E 4520 559E            005E6  4974=         BAL   R2,GENTXT2              GENERATE 2 BYTES         00397001
003162 0700                        4975=         NOPR  0                       *** GENERATED CODE ***   00398001
003164 506E 0000            00000  4976=         ST    R6,0(R14)               ADJUST LAT ENTRY         00399001
003168 4520 55A2            005EA  4977=FKF42A   BAL   R2,GENTXT4              GENERATE 4 BYTES         00400001
                                   4978=*                                      GENERATE ELEMENT COUNT   00401001
00316C 00000000                    4979=FKF42    DC    H'0',H'0'               *** GENERATED CODE ***   00402001
003170 D201 DA64 9000 00A64 00000  4980=         MVC   HALFW,0(R9)             INITIALIZE PARAM COUNT   00403001
                                   4981=*                                                               00404001
                                   4982=*        GENERATE ONE THUNK ADDR                                00405001
                                   4983=*                                                               00406001
003176 58F0 C178            031FC  4984=FKF45    L     R15,STENTRY                                      00407001
00317A 4BF0 5170            001B8  4985=         SH    R15,KH5                                          00408001
00317E 50F0 C178            031FC  4986=         ST    R15,STENTRY                                      00409001
003182 5060 C17C            03200  4987=         ST    R6,FKF48                SAVE PRPOINT             00410001
003186 D202 C10D F002 03191 00002  4988=         MVC   FKF46+1(3),2(R15)                                00411001
00318C                             4989=         CNOP  0,4                                              00412001
00318C 4520 55A2            005EA  4990=         BAL   R2,GENTXT4              GENERATE 4 BYTES         00413001
003190 00000000                    4991=FKF46    DC    F'0'                    *** GENERATED CODE ***   00414001
003194 5820 C17C            03200  4992=         L     R2,FKF48                                         00415001
003198 45E0 5574            005BC  4993=         BAL   R14,GENRLD              GENERATE RLD RECORD      00416001
00319C 0004                        4994=         DC    H'4'                                             00417001
00319E 0001                        4995=         DC    H'1'                                             00418001
0031A0 0001                        4996=         DC    H'1'                                             00419001
                                   4997=*                                                               00420001
0031A2 48F0 DA64            00A64  4998=         LH    R15,HALFW               DECREASE                 00421001
0031A6 4BF0 5170            001B8  4999=         SH    R15,KH5                          PARAM           00422001
0031AA 40F0 DA64            00A64  5000=         STH   R15,HALFW                              COUNT     00423001
0031AE 4720 C0F2            03176  5001=         BP    FKF45                   COUNT ¬ ZERO, BRANCH     00424001
0031B2 58F0 D5F8            005F8  5002=         L     R15,WORKPL                                       00425001
0031B6 4190 F00F            0000F  5003=         LA    R9,15(,R15)             CLEAR OPERAND STACK      00426001
0031BA D201 DA64 F008 00A64 00008  5004=         MVC   HALFW,8(R15)            GET                      00427001
0031C0 48F0 DA64            00A64  5005=         LH    R15,HALFW                   LAT                  00428001
0031C4 5AF0 D61C            0061C  5006=         A     R15,LATAB                        ENTRY           00429001
0031C8 506F 0000            00000  5007=         ST    R6,0(R15)               STORE PRPOINT IN LAT     00430001
0031CC 06A0                        5008=         BCTR  R10,0                   CLOPT                    00431001
0031CE 4540 590C            00954  5009=         BAL   R4,SCHDL                SEMIC COUNTER HANDLING   00432001
0031D2 58B0 5194            001DC  5010=         L     R11,DECADD              SWITCH TO PROGRAM CONTEXT 00433001
0031D6 07F5                        5011=         BR    R5                      RETURN TO SUBSTART       00434001
                                   5012=*                                                               00435001
0031D8 4B70 DA56            00A56  5013=FKH2     SH    R7,ONEENTRY                                      00436001
0031DC 9200 DA46      00A46        5014=         MVI   RII,0                   REGISTER ADR FREE        00437001
0031E0 47F0 C070            030F4  5015=         B     FKH1                                             00438001
                                   5016=*                                                               00439001
0031E4 4540 5D02            00D4A  5017=FKB25    BAL   R4,STACKAPI             INTRODUCE API            00440001
0031E8 47F0 C082            03106  5018=         B     FKJ2                                             00441001
                                   5019=*                                                               00442001
0031EC 4540 5310            00358  5020=FKC2     BAL   R4,SERR2                                         00443001
0031F0 00AF                        5021=         DC    H'175'                  ERROR 175                00444001
0031F2 4199 0005            00005  5022=         LA    R9,5(R9)                PREPARE FOR INSERTING API 00445001
0031F6 47F0 C160            031E4  5023=         B     FKB25                                            00446001
                                   5024=*                                                               00447001
                                   5025=*        WORKAREAS                                              00448001
                                   5026=*                                                               00449001
0031FA 0000
0031FC 00000000                    5027=STENTRY  DC    F'0'                    WORK AREA                00450001
003200 00000000                    5028=FKF48    DC    F'0'                                             00451001
                                   5029=*                                                               00452001
                                   5030=*********************************************************************** 00453001
                                   5031=*                                                               00454001
                                   5032=*        COMPILER PROGRAM - CP62                                00455001
                                   5033=*                                                               00456001
                                   5034=*********************************************************************** 00457001
                                   5035=*                                                               00458001
                                   5036=*   GOTO STATEMENT                                              00459001
                                   5037=*        CONTEXT             STATEMENT                          00460001
                                   5038=*        SOURCE OPERATOR     EPSILON, ETA, ;, END, ELSE         00461001
                                   5039=*        STACK OPERATOR      GOTO                               00462001
                                   5040=*        OPERAND             DESIGNATIONAL OPERAND              00463001
                                   5041=*                                                               00464001
                 R:C  03204        5042=         USING CP62,R12                                         00465001
003204 4140 C07E            03282  5043=CP62     LA    R4,FXJ1                 RETURN IF OPERAND MISSING 00466001
003208 4530 5F08            00F50  5044=         BAL   R3,OPDTEST              OPERAND TEST             00467001
00320C 9108 9001      00001        5045=         TM    1(R9),X'08'             OPD LABEL ?              00468001
003210 4780 C08E            03292  5046=         BZ    FXC2                    NO, BRANCH               00469001
003214 9104 9001      00001        5047=         TM    1(R9),X'04'                                      00470001
003218 4710 C08E            03292  5048=         BO    FXC2                                             00471001
00321C 9180 D080      00080        5049=         TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?      00472001
003220 4710 C07E            03282  5050=         BO    FXJ1                    YES, BRANCH              00473001
003224 4540 578A            007D2  5051=         BAL   R4,OPDREC                                        00474001
003228 9180 9003      00003        5052=         TM    3(R9),ADR*16            DESIGNATIONAL EXPRESSION ? 00475001
00322C 4710 C0A0            032A4  5053=         BO    FXE4                    YES, BRANCH              00476001
003230 D500 DA5D 9002 00A5D 00002  5054=         CLC   SPBNST+1(1),2(R9)       CURRENT PBN ?            00477001
003236 4770 C050            03254  5055=         BNE   FXG3                    NO, BRANCH               00478001
00323A D100 C048 9003 0324C 00003  5056=         MVN   FXH15+2(1),3(R9)                                 00479001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

003240 D200 C049 9004 0324D 00004  5057=         MVC   FXH15+3(1),4(R9)                                          00480001
003246 4520 55A6            005EE  5058=         BAL   R2,GENTXT6             GENERATE 6 BYTES                   00481001
                                   5059=*                                     GENERATE BRANCH TO LABEL           00482001
00324A 58FC 0000            00000  5060=FXH15    L     BRR,0(LAT)             *** GENERATED CODE ***             00483001
00324E 07FF                        5061=         BR    BRR                    *** GENERATED CODE ***             00484001
003250 47F0 C07E            03282  5062=         B     FXJ1                                                      00485001
                                   5063=*                                                                        00486001
                                   5064=*        GENERATE LLC (LOAD LABEL COMMON)                                00487001
                                   5065=*                                                                        00488001
003254 D100 C062 9003 03266 00003  5066=FXG3     MVN   FXG35+2(1),3(R9)                                          00489001
00325A D200 C063 9004 03267 00004  5067=         MVC   FXG35+3(1),4(R9)                                          00490001
003260 4520 55A2            005EA  5068=         BAL   R2,GENTXT4             GENERATE 4 BYTES                   00491001
003264 588C 0000            00000  5069=FXG35    L     ADR,0(LAT)             *** GENERATED CODE ***             00492001
003268 1BFF                        5070=         SR    R15,R15                                                   00493001
00326A 43F9 0002            00002  5071=         IC    R15,2(R9)                                                 00494001
00326E 89F0 0003            00003  5072=         SLL   R15,3                                                     00495001
003272 40F0 C078            0327C  5073=         STH   R15,FXG36+2                                               00496001
003276 4520 55A2            005EA  5074=         BAL   R2,GENTXT4             GENERATE 4 BYTES                   00497001
00327A 589B 0000            00000  5075=FXG36    L     GDSA,0(PBT)            *** GENERATED CODE ***             00498001
00327E 47F0 C0A8            032AC  5076=         B     FXH2                                                      00499001
                                   5077=*                                                                        00500001
003282 4190 9005            00005  5078=FXJ1     LA    R9,5(,R9)              CLOPD                              00501001
003286 94FE D080      00080        5079=         NI    COMPFLGS,255-OPERAND   RESET OPERAND                      00502001
00328A 92FF DA61      00A61        5080=         MVI   GPBN+1,X'FF'           GDSA UNDEFINED                     00503001
00328E 46A0 5060            000A8  5081=         BCT   R10,COMP               CLOPT AND COMP                     00504001
003292 9110 9000      00000        5082=FXC2     TM    0(R9),APIMASK          ALL PURPOUSE IDENTIFIER            00505001
003296 4710 C07E            03282  5083=         BO    FXJ1                   YES                                00506001
00329A 4540 5310            00358  5084=         BAL   R4,SERR2                                                  00507001
00329E 00AF                        5085=         DC    H'175'                 ERROR 175                          00508001
                                   5086=*                                                                        00509001
0032A0 47F0 C07E            03282  5087=         B     FXJ1                                                      00510001
                                   5088=*                                                                        00511001
0032A4 4B70 DA56            00A56  5089=FXE4     SH    R7,ONEENTRY            RELEASE STACK                      00512001
0032A8 9701 DA46      00A46        5090=         XI    RII,RIIADRM            REG ADR FREE                       00513001
                                   5091=*                                                                        00514001
                                   5092=*        GENERATE UNCONDITIONAL JUMP TO COMMON LABEL 'UJTCL'             00515001
                                   5093=*                                                                        00516001
0032AC 4520 55A2            005EA  5094=FXH2     BAL   R2,GENTXT4             GENERATE 4 BYTES                   00517001
0032B0 47FD 00E4            000E4  5095=         B     RETPROG(FSA)           *** GENERATED CODE ***             00518001
0032B4 47F0 C07E            03282  5096=         B     FXJ1                                                      00519001
                                   5097=*                                                                        00520001
                                   5098=*********************************************************************** 00521001
                                   5099=*                                                                        00522001
                                   5100=*        COMPILER PROGRAM - CP85                                         00523001
                                   5101=*                                                                        00524001
                                   5102=*********************************************************************** 00525001
                                   5103=*                                                                        00526001
                                   5104=*   BEGIN OF SWITCH LIST                                                 00527001
                                   5105=*        CONTEXT              PROGRAM                                    00528001
                                   5106=*        SOURCE OPERATOR       =                                         00529001
                                   5107=*        STACK OPERATOR       SWITCH                                     00530001
                                   5108=*        OPERANDS             NR OF SWITCH EL * 5 AND PRPOINT            00531001
                                   5109=*                             SWITCH IDENTIFIER                          00532001
                                   5110=*                             LABEL OPERAND                              00533001
                                   5111=*                                                                        00534001
                 R:C  032B8        5112=         USING CP85,R12                                                  00535001
0032B8 4540 5E38            00E80  5113=CP85     BAL   R4,MOVEOPDK            RESERVE ONE MORE OPDK ENTRY        00536001
0032BC D201 9000 DA50 00000 00A50  5114=         MVC   0(2,R9),ZEROHW         INITIAL ZERO TO SLSWE              00537001
0032C2 5060 D5F8            005F8  5115=         ST    R6,WORKPL                                                 00538001
0032C6 D202 9002 D5F9 00002 005F9  5116=         MVC   2(3,R9),WORKPL+1       FIRST THUNKADDR TO STACK           00539001
0032CC 58B0 519C            001E4  5117=         L     R11,STC                SWITCH TO STATEMENT CONTEXT        00540001
0032D0 D201 900D D0A2 0000D 000A2  5118=         MVC   13(2,R9),LN            STORE LN IN R9                     00541001
0032D6 922E A000      00000        5119=         MVI   0(R10),X'2E'           'SWITCH.=' REPLACES 'SWITCH'       00542001
0032DA 07F5                        5120=         BR    R5                     RETURN TO SUBSTART                 00543001
                                   5121=*                                                                        00544001
                                   5122=*********************************************************************** 00545001
                                   5123=*                                                                        00546001
                                   5124=*        COMPILER PROGRAM - CP34                                         00547001
                                   5125=*                                                                        00548001
                                   5126=*********************************************************************** 00549001
                                   5127=*                                                                        00550001
                                   5128=*   IF IN STATEMENT CONTEXT                                              00551001
                                   5129=*        CONTEXT              STATEMENT                                  00552001
                                   5130=*        SOURCE OPERATOR      IF                                         00553001
                                   5131=*        STACK OPERATOR       GOTO, SWITCH =, PROCEDURE BRACKET,LEFT     00554001
                                   5132=*                             BRACKET  ST PROC BRACKET, FOR =, STEP,     00555001
                                   5133=*                             UNTIL, WHILE,  , ARRAY DECL BRACKET,       00556001
                                   5134=*                             SE (SEE MATRIX)                            00557001
                                   5135=*        OPERAND              NONE                                       00558001
                                   5136=*                                                                        00559001
                 R:C  032DC        5137=         USING CP34,R12                                                  00560001
0032DC 9101 D080      00080        5138=CP34     TM    COMPFLGS,OPERAND       OPDT                               00561001
0032E0 4780 C012            032EE  5139=         BZ    CKD1                   OFF, BRANCH                        00562001
0032E4 4540 5304            0034C  5140=         BAL   R4,SERR4                                                  00563001
0032E8 00A4                        5141=         DC    H'164'                 ERROR 164                          00564001
                                   5142=*                                                                        00565001
0032EA 4190 9005            00005  5143=         LA    R9,5(,R9)              CLOPD                              00566001
0032EE 4540 5E30            00E78  5144=CKD1     BAL   R4,MOVEOPTK            OPTH(SOURCE)                       00567001
0032F2 D200 A000 8000 00000 00000  5145=         MVC   0(1,R10),0(R8)                                            00568001
0032F8 41B0 B144            00144  5146=         LA    R11,324(,R11)          CSW(EXP)                           00569001
0032FC 951D A000      00000        5147=         CLI   0(R10),X'1D'                                              00570001
003300 0775                        5148=         BNER  R5                     NO, RETURN TO SUBSTART             00571001
003302 9180 D080      00080        5149=         TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?                00572001
003306 0715                        5150=         BOR   R5                     YES, RETURN TO SUBSTART            00573001
003308 4540 5706            0074E  5151=         BAL   R4,CLEARRG                                                00574001
00330C 07F5                        5152=         BR    R5                     RETURN TO SUBSTART                 00575001
```

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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   5153=*                                                                        00576001
                                   5154=*********************************************************************** 00577001
                                   5155=*                                                                        00578001
                                   5156=*        END OF IEX50003                                                 00579001
                                   5157=*                                                                        00580001
                                   5158=*********************************************************************** 00581001
                                   5159=*                                                                        00582001
                                   5160          COPY  IEX50004                 IEX50004                         01934001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                   5162=*                                                                    00002001
                                   5163=*        CP12, CP19, CP20, CP21, CP22, CP23, CP33, CP57, CP61        00003001
                                   5164=*        CP64, CP71, CP83, CP84                                      00004001
                                   5165=*                                                                    00005001
                                   5166=*        DEFINITIONS WITHIN CSECT IEX50004                           00006001
                                   5167=*                                                                    00007001
                      00008        5168=NOASSIGN EQU   X'08'                                                 00008001
                      00040        5169=INREGBIT EQU   X'40'                                                 00009001
                      00140        5170=ENTIER   EQU   X'140'                 OFFSET INTO FSA FOR ENTIER RTN 00010001
                                   5171=*                                                                    00011001
                                   5172=********************************************************************** 00012001
                                   5173=*                                                                    00013001
                                   5174=*        COMPILER PROGRAM - CP12                                     00014001
                                   5175=*                                                                    00015001
                                   5176=********************************************************************** 00016001
                                   5177=*                                                                    00017001
                                   5178=*        ASSIGNMENT                                                  00018001
                                   5179=*        CONTEXT              PROGRAM                                00019001
                                   5180=*        SOURCE OPERATOR      =                                      00020001
                                   5181=*        STACK OPERATOR       BEGIN, ;, THENS, ELSES, DO             00021001
                                   5182=*        OPERAND              LEFT SIDE VARIABLE                     00022001
                                   5183=*                                                                    00023001
                 R:C  0330E        5184=         USING CP12,R12                                              00024001
00330E 9101 D080      00080        5185=CP12     TM    COMPFLGS,OPERAND       OPDT ?                         00025001
003312 4780 C066            03374  5186=         BZ    AWC2                   NO, BRANCH                     00026001
                                   5187=*                                                                    00027001
                                   5188=*        ENTRY FROM CP21                                             00028001
                                   5189=*                                                                    00029001
003316 9108 9000      00000        5190=AWD1     TM    0(R9),X'08'            ASSIGMENT POSSIBLE ?           00030001
00331A 4710 C074            03382  5191=         BO    AWD2                   NO, BRANCH TO AWD2             00031001
00331E 9140 9000      00000        5192=         TM    0(R9),INREGBIT         OPD IN REGISTER ?              00032001
003322 4780 C05A            03368  5193=         BZ    AWJ1                   YES, BRANCH                    00033001
003326 91C0 9001      00001        5194=         TM    1(R9),X'C0'            OPD TYPE PROCEDURE IDENT ?     00034001
00332A 4710 C082            03390  5195=         BO    AWF2                   YES, BRANCH                    00035001
00332E 9120 9001      00001        5196=         TM    1(R9),X'20'            OPD CALLED BY NAME ?           00036001
003332 4710 C05A            03368  5197=         BO    AWJ1                   NO, BRANCH IF NOT              00037001
003336 9180 D080      00080        5198=         TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?            00038001
00333A 4710 C05A            03368  5199=         BO    AWJ1                   YES, BRANCH                    00039001
                                   5200=*                                                                    00040001
                                   5201=*        GENERATE ASSIGNMENT CONTROL                                 00041001
                                   5202=*                                                                    00042001
00333E 4540 593C            00984  5203=         BAL   R4,ROUTINE1            LOAD VPLACE,WPLACE             00043001
003342 4810 DA6A            00A6A  5204=         LH    R1,WPLACE                                             00044001
003346 4110 1004            00004  5205=         LA    R1,4(,R1)                                             00045001
00334A 4010 C09C            033AA  5206=         STH   R1,AWE45+2                                            00046001
00334E D300 C09C DA72 033AA 00A72  5207=         MVZ   AWE45+2(1),VPLACE      INSERT REG INTO CODE           00047001
003354 4120 C09A            033A8  5208=         LA    R2,AWE45                                              00048001
003358 45E0 5588            005D0  5209=         BAL   R14,GENTXTS                                           00049001
00335C 0008                        5210=         DC    H'8'                   GENERATE 8 BYTES               00050001
                                   5211=*                                                                    00051001
00335E 4540 578A            007D2  5212=         BAL   R4,OPDREC                                             00052001
003362 D200 9002 DA5D 00002 00A5D  5213=         MVC   2(1,R9),SPBNST+1       CURRENT BLOCK, NEVER FCTVA     00053001
                                   5214=*                                     ALWAYS ADDR, NEVER VALUE       00054001
003368 4540 5E30            00E78  5215=AWJ1     BAL   R4,MOVEOPTK            OPTH(SOURCE)                   00055001
00336C D200 A000 8000 00000 00000  5216=         MVC   0(1,R10),0(R8)                                        00056001
003372 07F5                        5217=         BR    R5                                                    00057001
                                   5218=*                                                                    00058001
003374 4540 5318            00360  5219=AWC2     BAL   R4,SERR3                                              00059001
003378 00B0                        5220=         DC    H'176'                 ERROR 176                      00060001
                                   5221=*                                                                    00061001
                                   5222=*        ENTRY FROM CP21                                             00062001
                                   5223=*                                                                    00063001
00337A 4540 5D02            00D4A  5224=AWC4     BAL   R4,STACKAPI                                           00064001
00337E 47F0 C05A            03368  5225=         B     AWJ1                                                  00065001
                                   5226=*                                                                    00066001
003382 4540 5380            003C8  5227=AWD2     BAL   R4,SERR1                                              00067001
003386 00BE                        5228=         DC    H'190'                 ERROR 190                      00068001
                                   5229=*                                                                    00069001
003388 4199 0005            00005  5230=         LA    R9,5(R9)               TO PREPARE STACKAPI            00070001
00338C 47F0 C06C            0337A  5231=         B     AWC4                   BRANCH                         00071001
                                   5232=*                                                                    00072001
                                   5233=*        CHANGE INT NAME TO OBJECT STACK NAME                        00073001
                                   5234=*                                                                    00074001
003390 92C0 9000      00000        5235=AWF2     MVI   0(R9),X'C0'                                           00075001
003394 9403 9001      00001        5236=         NI    1(R9),X'03'                                           00076001
003398 9630 9001      00001        5237=         OI    1(R9),X'30'                                           00077001
00339C 9200 9003      00003        5238=         MVI   3(R9),X'00'                                           00078001
0033A0 9218 9004      00004        5239=         MVI   4(R9),X'18'            DISPL IS 24                    00079001
0033A4 47F0 C05A            03368  5240=         B     AWJ1                                                  00080001
                                   5241=*                                                                    00081001
0033A8 9108 A000      00000        5242=AWE45    TM    0(CDSA),X'08'          *** GENERATED CODE ***         00082001
0033AC 471D 0224            00224  5243=         BO    OERR22(FSA)            *** GENERATED CODE ***         00083001
                                   5244=*                                                                    00084001
                                   5245=********************************************************************** 00085001
                                   5246=*                                                                    00086001
                                   5247=*        COMPILER PROGRAM - CP19                                     00087001
                                   5248=*                                                                    00088001
                                   5249=********************************************************************** 00089001
                                   5250=*                                                                    00090001
                                   5251=*        IF IN ASSIGNMENT STATEMENT                                  00091001
                                   5252=*        CONTEXT              PROGRAM                                00092001
                                   5253=*        SOURCE OPERATOR      IF                                     00093001
                                   5254=*        STACK OPERATOR        =                                     00094001
                                   5255=*        OPERAND              NONE                                   00095001
                                   5256=*                                                                    00096001
                 R:C  033B0        5257=         USING CP19,R12                                              00097001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0033B0 41B0 B122              00122  5258=CP19      LA    R11,290(,R11)          CSW(STC)                 00098001
0033B4 47F0 5060              000A8  5259=          B     COMP                   COMPARE                  00099001
                                     5260=*                                                               00100001
                                     5261=*********************************************************************** 00101001
                                     5262=*                                                               00102001
                                     5263=*         COMPILER PROGRAM - CP20                               00103001
                                     5264=*                                                               00104001
                                     5265=*********************************************************************** 00105001
                                     5266=*                                                               00106001
                                     5267=*         ASSIGNMENT                                            00107001
                                     5268=*         CONTEXT             PROGRAM                           00108001
                                     5269=*         SOURCE OPERATOR     ;, EPSILON, ETA, END, ELSE        00109001
                                     5270=*         STACK OPERATOR       =                                00110001
                                     5271=*         OPERAND             RIGHT SIDE OPERAND                00111001
                                     5272=*                                                               00112001
                  R:C  033B8         5273=          USING CP20,R12                                        00113001
0033B8 4140 C034              033EC  5274=CP20      LA    R4,BIG2                                         00114001
0033BC 4530 5F08              00F50  5275=          BAL   R3,OPDTEST                                      00115001
0033C0 4540 5E9A              00EE2  5276=          BAL   R4,ARRTEST1                                     00116001
0033C4 9103 9001        00001        5277=          TM    1(R9),X'03'            OPD BOOL, REAL OR INTEGER ? 00117001
0033C8 4780 C15E              03516  5278=          BZ    BIE3                   NO, ERROR                00118001
0033CC 9104 9001        00001        5279=BIC2      TM    1(R9),X'04'                                     00119001
0033D0 4710 C168              03520  5280=          BO    BIE32                                           00120001
0033D4 9180 D080        00080        5281=          TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?      00121001
0033D8 4710 C0C2              0347A  5282=          BO    BIE4                   YES, BRANCH              00122001
0033DC 9140 9000        00000        5283=          TM    0(R9),INREGBIT         OPD IN REGISTER ?        00123001
0033E0 4780 C0BA              03472  5284=          BZ    BID4                   YES, BRANCH              00124001
0033E4 4540 578A              007D2  5285=          BAL   R4,OPDREC              OPERAND RECOGNIZER       00125001
0033E8 47F0 C0BA              03472  5286=          B     BID4                                            00126001
                                     5287=*                                                               00127001
                                     5288=*         ENTRY FROM CP69                                       00128001
                                     5289=*                                                               00129001
0033EC 06A0                          5290=BIG2      BCTR  R10,0                  CLEAR OPERATOR           00130001
0033EE 9518 A000        00000        5291=          CLI   0(R10),X'18'           'FOR' ?                  00131001
0033F2 4770 C04C              03404  5292=          BNE   BIJ2                   NO, BRANCH               00132001
0033F6 4190 9005              00005  5293=          LA    R9,5(,R9)              RELEASE OPERAND          00133001
0033FA 5810 C22C              035E4  5294=          L     R1,AJMPCP43            R1 -> CP43 ENTRY POINT   00134001
0033FE 58C0 51BC              00204  5295=          L     R12,SCPTAB+4*6         R12 -> CP6 FOR ADRESSABILITY 00135001
003402 07F1                          5296=          BR    R1                     BRANCH TO CP 43          00136001
                                     5297=*                                                               00137001
003404 952C A000        00000        5298=BIJ2      CLI   0(R10),X'2C'           ARRAY BRACKET ?          00138001
003408 4770 C062              0341A  5299=          BNE   BIK2                   NO, BRANCH               00139001
00340C 4190 9005              00005  5300=          LA    R9,5(,R9)              CLEAR OPERAND            00140001
003410 5810 C228              035E0  5301=          L     R1,ADERE2              R1 -> CP51 ENTRY POINT   00141001
003414 58C0 5270              002B8  5302=          L     R12,SCPTAB+4*51        R12 -> CP51              00142001
003418 07F1                          5303=          BR    R1                     BRANCH TO CP51 ENTRY POINT 00143001
                                     5304=*                                                               00144001
00341A 9516 A000        00000        5305=BIK2      CLI   0(R10),XFASSIGN        OPERATOR IS 'ASSIGN' ?   00145001
00341E 4780 C076              0342E  5306=          BE    BIK1                   YES, BRANCH              00146001
003422 94FE D080        00080        5307=BIK5      NI    COMPFLGS,255-OPERAND   RESET OPERAND            00147001
003426 4190 900A              0000A  5308=          LA    R9,10(,R9)             CLEAR OPERAND TWICE      00148001
00342A 47F0 5060              000A8  5309=          B     COMP                   BRANCH TO COMP           00149001
                                     5310=*                                                               00150001
                                     5311=*         RESTORE R7, RII, RIR, CII, CIR                        00151001
                                     5312=*                                                               00152001
00342E 4870 C216              035CE  5313=BIK1      LH    R7,STRDP                                        00153001
003432 D207 DA42 C218 00A42 035D0    5314=          MVC   CII(8),STRDCIRI                                 00154001
003438 D204 9005 9000 00005 00000    5315=          MVC   5(5,R9),0(R9)          MOVE LAST OPD TO NEXT LAST SPOT 00155001
00343E 4190 9005              00005  5316=          LA    R9,5(,R9)              CLEAR OPERAND            00156001
003442 9101 DA46        00A46        5317=          TM    RII,RIIADRM            ADR OCCUPIED ?           00157001
003446 4780 C09E              03456  5318=          BZ    BIK3                   NO                       00158001
00344A 5990 D5E0              005E0  5319=          C     R9,RUTI+32                                      00159001
00344E 4770 C09E              03456  5320=          BNE   BIK3                                            00160001
003452 9200 DA46        00A46        5321=          MVI   RII,0                  RELEASE 'ADR' IN REG USE TABLE 00161001
003456 9120 9000        00000        5322=BIK3      TM    0(R9),X'20'                                     00162001
00345A 4780 C014              033CC  5323=          BZ    BIC2                                            00163001
00345E 9140 9000        00000        5324=          TM    0(R9),X'40'                                     00164001
003462 4710 C014              033CC  5325=          BO    BIC2                                            00165001
003466 9201 DA46        00A46        5326=          MVI   RII,X'01'                                       00166001
00346A 5090 D5E0              005E0  5327=          ST    R9,RUTI+32                                      00167001
00346E 47F0 C014              033CC  5328=          B     BIC2                                            00168001
                                     5329=*                                                               00169001
003472 9108 9005        00005        5330=BID4      TM    5(R9),NOASSIGN         TEST NO ASSIGNMENT BIT   00170001
003476 4710 C156              0350E  5331=          BO    BIE31                  ERROR IF NO ASSIGNMENT BIT 00171001
00347A 9103 9001        00001        5332=BIE4      TM    1(R9),X'03'            TEST TYPE BITS           00172001
00347E 4780 C15E              03516  5333=          BZ    BIE3                   ERROR IF ZEROES IN TYPE FIELD 00173001
003482 4740 C130              034E8  5334=          BM    BIAE2                  BRANCH MIXED (=NOT BOOLEAN) 00174001
003486 9103 9006        00006        5335=          TM    6(R9),X'03'            NEXT LAST OPD BOOLEAN ?  00175001
00348A 47E0 C14A              03502  5336=          BNO   BIE34                  BRANCH IF NOT BOOLEAN    00176001
00348E 9180 D080        00080        5337=          TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?      00177001
003492 4710 C034              033EC  5338=          BO    BIG2                   YES, BRANCH              00178001
                                     5339=*                                                               00179001
                                     5340=*         GENERATE BOOLEAN ASSIGN                               00180001
                                     5341=*                                                               00181001
003496 91C0 9000        00000        5342=BIG5      TM    0(R9),X'C0'                                     00182001
00349A 47E0 C190              03548  5343=          BNO   BIBG1                                           00183001
00349E 9130 9001        00001        5344=          TM    1(R9),X'30'            TEST IF RIGHT OPD BOOL CONST 00184001
0034A2 4770 C190              03548  5345=          BNZ   BIBG1                  BRANCH IF NOT A CONSTANT 00185001
                                     5346=*                                                               00186001
                                     5347=*         GENERATE ASSIGN, RIGHT OPD BOOL CON                   00187001
                                     5348=*                                                               00188001
0034A6 4540 C20A              035C2  5349=BIAH16    BAL   R4,SAVECIRI                                     00189001
0034AA 4190 9005              00005  5350=          LA    R9,5(,R9)                                       00190001
0034AE 9120 9000        00000        5351=          TM    0(R9),X'20'                                     00191001
0034B2 4710 C128              034E0  5352=          BO    BIAH161                                         00192001
0034B6 4540 593C              00984  5353=          BAL   R4,ROUTINE1                                     00193001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

0034BA 4B90 5170              001B8  5354=BIAH162  SH    R9,KH5
0034BE D201 C122 DA6A 034DA 00A6A  5355=          MVC   BIAH18+2(2),WPLACE
0034C4 D300 C122 DA72 034DA 00A72  5356=          MVZ   BIAH18+2(1),VPLACE
0034CA 9401 9004        00004      5357=          NI    4(R9),X'01'
0034CE D200 C121 9004 034D9 00004  5358=          MVC   BIAH18+1(1),4(R9)       INSERT CONSTANT TO CODE
0034D4 4520 55A2              005EA  5359=          BAL   R2,GENTXT4               GENERATE 4 BYTES
0034D8 9200 0000        00000      5360=BIAH18    MVI   0(0),X'00'              *** GENERATED CODE ***
0034DC 47F0 C034              033EC  5361=          B     BIG2
                                   5362=*
0034E0 4540 59F2              00A3A  5363=BIAH161  BAL   R4,ROUTINE3
0034E4 47F0 C102              034BA  5364=          B     BIAH162
                                   5365=*
0034E8 9103 9006        00006      5366=BIAE2     TM    6(R9),X'03'             LAST OPD NONBOOLEAN
0034EC 4740 C174              0352C  5367=          BM    BIBA1                    BR IF MIXED, ERROR OTHERWISE
0034F0 9110 9005        00005      5368=          TM    5(R9),APIMASK            BLO AN API ?
0034F4 4710 C034              033EC  5369=          BO    BIG2                     YES, BRANCH
0034F8 4540 5380              003C8  5370=BIE33     BAL   R4,SERR1
0034FC 00C1                        5371=          DC    H'193'                   ERROR 193
                                   5372=*
0034FE 47F0 C034              033EC  5373=          B     BIG2
                                   5374=*
003502 9110 9000        00000      5375=BIE34     TM    0(R9),APIMASK            LO AN API ?
003506 4710 C034              033EC  5376=          BO    BIG2                     YES, BRANCH
00350A 47F0 C140              034F8  5377=          B     BIE33
                                   5378=*
00350E 9110 9005        00005      5379=BIE31     TM    5(R9),APIMASK            BLO AN API ?
003512 4710 C034              033EC  5380=          BO    BIG2                     YES, BRANCH
003516 4540 5380              003C8  5381=BIE3      BAL   R4,SERR1
00351A 00C0                        5382=          DC    H'192'                   ERROR 192
                                   5383=*
00351C 47F0 C034              033EC  5384=          B     BIG2
                                   5385=*
003520 9110 9000        00000      5386=BIE32     TM    0(R9),APIMASK            LO AN API ?
003524 4710 C034              033EC  5387=          BO    BIG2                     YES, BRANCH
003528 47F0 C15E              03516  5388=          B     BIE3
                                   5389=*
00352C 9180 D080        00080      5390=BIBA1     TM    COMPFLGS,COMPMODE        SYNTAX CHECK MODE ?
003530 4710 C034              033EC  5391=          BO    BIG2                     YES, BRANCH
003534 9102 9006        00006      5392=          TM    6(R9),X'02'              NEXT LAST OPD 'REAL' ?
003538 4780 C19E              03556  5393=          BZ    BICA1                    NO, BRANCH
00353C 9102 9001        00001      5394=          TM    1(R9),X'02'              LAST OPERAND 'REAL' ?
003540 4710 C190              03548  5395=          BO    BIBG1                    YES, BRANCH
003544 4540 545E              004A6  5396=          BAL   R4,TRINRE                GENERATE INTEGER REAL CONVERSION
                                   5397=*
                                   5398=*         GENERATE 'ASSIGN REAL'
                                   5399=*
003548 4540 C20A              035C2  5400=BIBG1     BAL   R4,SAVECIRI
00354C 5810 C220              035D8  5401=          L     R1,ADHEB2                R1 -> DHEB2 ENTRY IN CP69
003550 58C0 52B8              00300  5402=          L     R12,SCPTAB+4*69          R12 -> CP69
003554 07F1                        5403=          BR    R1                       BRANCH TO DHEB2 IN CP69
                                   5404=*
003556 9102 9001        00001      5405=BICA1     TM    1(R9),X'02'              LAST (RIGHT) OPERAND 'REAL'
00355A 4780 C1E6              0359E  5406=          BZ    BICF1                    NO, BRANCH
00355E 4540 5506              0054E  5407=          BAL   R4,TRREIN                GENERATE REAL INTEGER CONVERSION
003562 4540 5AB0              00AF8  5408=          BAL   R4,ROUTINE7              GET NEXT FREE REGISTER
003566 8BE0 0002              00002  5409=          SLA   R14,2
00356A 509E D5C0              005C0  5410=          ST    R9,RUTI(R14)             R9 TO REG USAGE TABLE
00356E 8BE0 0002              00002  5411=          SLA   R14,2
003572 41EE 000E              0000E  5412=          LA    R14,14(R14)
003576 42E0 C1C7              0357F  5413=          STC   R14,BICA15+1             REG NUMBER TO INSTRUCTION
00357A 4520 559E              005E6  5414=          BAL   R2,GENTXT2               GENERATE 2 BYTES
00357E 1800                        5415=BICA15    LR    0,0                      *** GENERATED CODE ***
003580 9288 9000        00000      5416=          MVI   0(R9),X'88'
003584 9231 9001        00001      5417=          MVI   1(R9),X'31'
003588 D200 9002 DA5D 00002 00A5D  5418=          MVC   2(1,R9),SPBNST+1
00358E 4070 DA64              00A64  5419=          STH   R7,HALFW
003592 D201 9003 DA64 00003 00A64  5420=          MVC   3(2,R9),HALFW
003598 D300 9003 C1C7 00003 0357F  5421=          MVZ   3(1,R9),BICA15+1
                                   5422=*
                                   5423=*         GENERATE 'ASSIGN INTEGER'
                                   5424=*
00359E 4540 C20A              035C2  5425=BICF1     BAL   R4,SAVECIRI
0035A2 5810 C224              035DC  5426=          L     R1,ADHZB1                R1 -> DHZB1 ENTRY IN CP69
0035A6 58C0 52B8              00300  5427=          L     R12,SCPTAB+4*69          R12 -> CP69
0035AA 07F1                        5428=          BR    R1                       BRANCH TO DHZB1 ENTRY IN CP69
                                   5429=*
                                   5430=*         RELEASE OBJECT T STACK ENTRY AND REG
                                   5431=*
0035AC 91C0 9000        00000      5432=RELOSREG TM    0(R9),X'C0'
0035B0 0714                        5433=          BOR   R4                       RETURN IF IDENT FROM ITAB
0035B2 4B70 DA56              00A56  5434=          SH    R7,ONEENTRY              RELEASE ONE OBJ T STACK ENTRY
0035B6 9140 9000        00000      5435=          TM    0(R9),INREGBIT
0035BA 0714                        5436=          BOR   R4                       RETURN IF OPD NOT 'IN REG'
0035BC 94FE DA46        00A46      5437=          NI    RII,X'FE'                RELEASE 'ADR' IN REG USE TABLE
0035C0 07F4                        5438=          BR    R4
                                   5439=*
                                   5440=*         SAVE R7, CII, CIR, RII, RIR
                                   5441=*
0035C2 4070 C216              035CE  5442=SAVECIRI STH   R7,STRDP
0035C6 D207 C218 DA42 035D0 00A42  5443=          MVC   STRDCIRI(8),CII
0035CC 07F4                        5444=          BR    R4
                                   5445=*
0035CE 0000                        5446=STRDP     DC    H'0'
0035D0 4040404040404040            5447=STRDCIRI DC    8C' '
                                   5448=*
0035D8 000052EE                    5449=ADHEB2    DC    A(DHEB2)                 ENTRY TO CP69
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0035DC 000058C4                    5450=ADHZB1   DC     A(DHZB1)                                                 00290001
0035E0 00002E1E                    5451=ADERE2   DC     A(DERE2)             ENTRY TO CP51, BASE CP51            00291001
0035E4 0000151E                    5452=AJMPCP43 DC     A(DJH1E43)           ENTRY TO CP43, BASE CP6             00292001
                                   5453=*                                                                        00293001
                                   5454=*********************************************************************** 00294001
                                   5455=*                                                                        00295001
                                   5456=*        COMPILER PROGRAM - CP21                                         00296001
                                   5457=*                                                                        00297001
                                   5458=*********************************************************************** 00298001
                                   5459=*                                                                        00299001
                                   5460=*        MULTIPLE ASSIGNMENT                                             00300001
                                   5461=*        CONTEXT              PROGRAM                                    00301001
                                   5462=*        SOURCE OPERATOR        =                                        00302001
                                   5463=*        STACK OPERATOR         =                                        00303001
                                   5464=*        OPERAND              LEFT SIDE VARIABLE                         00304001
                                   5465=*                                                                        00305001
                 R:C  035E8        5466=         USING CP21,R12                                                  00306001
0035E8 9101 D080      00080        5467=CP21     TM     COMPFLGS,OPERAND     OPERAND ON ?                        00307001
0035EC 4780 C038            03620  5468=         BZ     BKB2                 NO, BRANCH                          00308001
0035F0 4300 9001            00001  5469=         IC     R0,1(,R9)            LOAD R0,R9+1                        00309001
0035F4 4310 9006            00006  5470=         IC     R1,6(,R9)            LOAD R1,R9+6                        00310001
0035F8 5400 5188            001D0  5471=         N      R0,TYPETEST          CLEAR FIRST 30 BITS OF GPR0         00311001
0035FC 5410 5188            001D0  5472=         N      R1,TYPETEST          CLEAR FIRST 30 BITS OF GPR1         00312001
003600 58C0 51D4            0021C  5473=         L      R12,SCPTAB+4*12      R12 -> CP12                         00313001
003604 1B01                        5474=         SR     R0,R1                SUBTRACT                            00314001
003606 478C 0008            00008  5475=         BZ     AWD1-CP12(R12)       ZERO, BRANCH TO AWD1 IN CP12        00315001
00360A 9110 9000      00000        5476=         TM     0(R9),APIMASK        LO AN API ?                         00316001
00360E 0715                        5477=         BOR    R5                   YES, BRANCH TO SUBSTART             00317001
003610 9110 9005      00005        5478=         TM     5(R9),APIMASK        BLO AN API ?                        00318001
003614 0715                        5479=         BOR    R5                   YES, BRANCH TO SUBSTART             00319001
003616 4540 5380            003C8  5480=         BAL    R4,SERR1                                                 00320001
00361A 00AC                        5481=         DC     H'172'               ERROR 172                           00321001
                                   5482=*                                                                        00322001
00361C 47FC 006C            0006C  5483=         B      AWC4-CP12(R12)       BRANCH TO AWC4 IN CP12              00323001
                                   5484=*                                                                        00324001
003620 4540 5304            0034C  5485=BKB2     BAL    R4,SERR4                                                 00325001
003624 00A2                        5486=         DC     H'162'               ERROR 162                           00326001
                                   5487=*                                                                        00327001
003626 07F5                        5488=         BR     R5                   RETURN TO SUBSTART                  00328001
                                   5489=*                                                                        00329001
                                   5490=*********************************************************************** 00330001
                                   5491=*                                                                        00331001
                                   5492=*        COMPILER PROGRAM - CP22                                         00332001
                                   5493=*                                                                        00333001
                                   5494=*********************************************************************** 00334001
                                   5495=*                                                                        00335001
                                   5496=*        ARITHM OR BOOL EXPRESSION IN ASSIGNMENT STATEMENT               00336001
                                   5497=*        CONTEXT              PROGRAM                                    00337001
                                   5498=*        SOURCE OPERATOR      (, ARITHM OP, BOOL OP, REL OP              00338001
                                   5499=*        STACK OPERATOR         =                                        00339001
                                   5500=*        OPERAND              ARRAY OR PROCEDURE IDENTIFIER OR           00340001
                                   5501=*                             ARITHMETIC OR BOOLEAN OPERAND OR NONE      00341001
                                   5502=*                                                                        00342001
                 R:C  03628        5503=         USING CP22,R12                                                  00343001
003628 58B0 51A0            001E8  5504=CP22     L      R11,EXC              CSW(EXP)                            00344001
00362C 47F0 5060            000A8  5505=         B      COMP                 COMPARE                             00345001
                                   5506=*                                                                        00346001
                                   5507=*********************************************************************** 00347001
                                   5508=*                                                                        00348001
                                   5509=*        COMPILER PROGRAM - CP23                                         00349001
                                   5510=*                                                                        00350001
                                   5511=*********************************************************************** 00351001
                                   5512=*                                                                        00352001
                                   5513=*        PARAMETERLESS PROCEDURE STATEMENT OR STATEMENT END              00353001
                                   5514=*        CONTEXT              PROGRAM                                    00354001
                                   5515=*        SOURCE OPERATOR      ;, EPSILON, ETA, END                       00355001
                                   5516=*        STACK OPERATOR       ;                                          00356001
                                   5517=*        OPERAND              PROCEDURE IDENTIFIER OR NONE               00357001
                                   5518=*                                                                        00358001
                 R:C  03630        5519=         USING CP23,R12                                                  00359001
003630 9101 D080      00080        5520=CP23     TM     COMPFLGS,OPERAND     OPDT                                00360001
003634 4780 C014            03644  5521=         BZ     BOD1                 OFF, BRANCH                         00361001
003638 4540 5D54            00D9C  5522=         BAL    R4,PLPRST                                                00362001
00363C 4190 9005            00005  5523=         LA     R9,5(,R9)                                                00363001
003640 94FE D080      00080        5524=         NI     COMPFLGS,255-OPERAND RESET OPERAND                       00364001
003644 950B 8000      00000        5525=BOD1     CLI    0(R8),XFSCOLON       SOURCE SEMICOLON ?                  00365001
003648 4770 C022            03652  5526=         BNE    BOE1                 NO, BRANCH                          00366001
00364C 4540 590C            00954  5527=         BAL    R4,SCHDL             YES, ENTER SEMICOLON HANDLING       00367001
003650 07F5                        5528=         BR     R5                   RETURN TO SUBSTART                  00368001
                                   5529=*                                                                        00369001
003652 46A0 5060            000A8  5530=BOE1     BCT    R10,COMP             CLOPT AND COMP                      00370001
                                   5531=*                                                                        00371001
                                   5532=*********************************************************************** 00372001
                                   5533=*                                                                        00373001
                                   5534=*        COMPILER PROGRAM - CP33                                         00374001
                                   5535=*                                                                        00375001
                                   5536=*********************************************************************** 00376001
                                   5537=*                                                                        00377001
                                   5538=*        ARITHMETIC OR BOOLEAN EXPRESSIONS IN STATEMENT CONTEXT          00378001
                                   5539=*        CONTEXT              STATEMENT                                  00379001
                                   5540=*        SOURCE OPERATOR      ARITHM OR BOOLEAN OR RELATIONAL OPERATOR   00380001
                                   5541=*        STACK OPERATOR       PROCEDURE BRACKET, LEFT BRACKET,           00381001
                                   5542=*                             ST PROC BRACKET,FOR =, STEP, UNTIL,        00382001
                                   5543=*                             WHILE,  , ARRAY DECL BRACKET               00383001
                                   5544=*        OPERAND              ARITHMETIC OR BOOLEAN OPERAND              00384001
                                   5545=*                                                                        00385001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

              R:C  03656             5546=          USING CP33,R12                                                00386001
003656 41B0 B144           00144     5547=CP33      LA    R11,324(,R11)            CSW(EXP)                       00387001
00365A 47F0 5060           000A8     5548=          B     COMP                     COMPARE                        00388001
                                     5549=*                                                                       00389001
                                     5550=********************************************************************** 00390001
                                     5551=*                                                                       00391001
                                     5552=*         COMPILER PROGRAM - CP57                                       00392001
                                     5553=*                                                                       00393001
                                     5554=********************************************************************** 00394001
                                     5555=*                                                                       00395001
                                     5556=*         PROCEDURE CALL                                                00396001
                                     5557=*         CONTEXT              STATEMENT                                00397001
                                     5558=*         SOURCE OPERATOR      , OR )                                   00398001
                                     5559=*         STACK OPERATOR       PROCEDURE BRACKET                        00399001
                                     5560=*         OPERANDS             ACTUAL PARAMETER                         00400001
                                     5561=*                              PARAMETER COUNT AND PRPOINTER AT CALL    00401001
                                     5562=*                              PAR CHAR AND PRPOINTER AT NEXT THUNK ADR 00402001
                                     5563=*                              LABEL NUMBER                             00403001
                                     5564=*                              PROCEDURE IDENTIFIER                     00404001
                                     5565=*                                                                       00405001
                                     5566=*         COMPUTE FOR LATER REFERENCE (FROM SLPAR IN STACK)             00406001
                                     5567=*         STACK ADDR WHICH POINTS TO ENTRY CONTAINING LN                00407001
                                     5568=*         (=ONE ENTRY AFTER PROCEDURE IDENTIFIER ENTRY)                 00408001
                                     5569=*         STORE SLPAR (NUMBER OF PARAMETERS TIMES FIVE)                 00409001
                                     5570=*                                                                       00410001
              R:C  0365E             5571=          USING CP57,R12                                                00411001
00365E 9101 D080       00080         5572=CP57      TM    COMPFLGS,OPERAND         OPDTEST                        00412001
003662 4780 C2F2             03950   5573=          BZ    FGAB2                    FALSE                          00413001
003666 D201 C312 9005 03970 00005    5574=          MVC   STACKST(2),5(R9)                                        00414001
00366C 48F0 C312             03970   5575=          LH    R15,STACKST                                             00415001
003670 41FF 900A             0000A   5576=          LA    R15,10(R15,R9)                                          00416001
003674 50F0 C312             03970   5577=          ST    R15,STACKST                                             00417001
003678 D201 C316 9005 03974 00005    5578=          MVC   STSLPAR(2),5(R9)         MOVE SLPAR                     00418001
00367E 9180 D080       00080         5579=          TM    COMPFLGS,COMPMODE        SYNTAX CHECK MODE ?            00419001
003682 4710 C156             037B4   5580=          BO    FGAG1                    YES, BRANCH                    00420001
003686 9680 58B8       00900         5581=          OI    PROCWPS,X'80'            NO PARAMETERLESS PROC CHECK    00421001
00368A 4540 578A             007D2   5582=          BAL   R4,OPDREC                OPERAND RECOGNIZER             00422001
00368E 9780 58B8       00900         5583=          XI    PROCWPS,X'80'            SWITCH OFF                     00423001
                                     5584=*                                                                       00424001
                                     5585=*         LOAD ACTUAL PARAMETER ADDR LAPA                               00425001
                                     5586=*                                                                       00426001
003692 9120 9000       00000         5587=FGCA1     TM    0(R9),X'20'              OPD REPRESENTS ADDR ?          00427001
003696 4710 C09C             036FA   5588=          BO    FGCB3                    YES                            00428001
00369A 4540 5706             0074E   5589=          BAL   R4,CLEARRG               STORE REGS IN OBJ TIME STACK   00429001
00369E 4540 5CE8             00D30   5590=          BAL   R4,DECOMP                DECOMPOSE OPERAND              00430001
0036A2 48F0 DA4A             00A4A   5591=          LH    R15,OPDPBN               GET                            00431001
0036A6 8BF0 0003             00003   5592=          SLA   R15,3                        PBN                        00432001
0036AA 40F0 C0B2             03710   5593=          STH   R15,FGCD35+2                    TIMES EIGHT TO GEN CODE 00433001
0036AE 48F0 DA4E             00A4E   5594=          LH    R15,OPDLN                LN                             00434001
0036B2 40F0 C0AA             03708   5595=          STH   R15,FGCD34+2               TO GENERATED                 00435001
0036B6 40F0 C0EA             03748   5596=          STH   R15,FGCF34+2                            CODE            00436001
0036BA 9108 9001       00001         5597=          TM    1(R9),X'08'              OPERAND LABEL OR SWITCH ?      00437001
0036BE 4710 C0A4             03702   5598=          BO    FGCD3                    YES                            00438001
0036C2 91C0 9001       00001         5599=          TM    1(R9),X'C0'              OPERAND PROCEDURE ?            00439001
0036C6 4780 C074             036D2   5600=          BZ    FGCF21                   NO PROCEDURE                   00440001
0036CA 9180 9000       00000         5601=          TM    0(R9),X'80'                                             00441001
0036CE 4710 C0B8             03716   5602=          BO    FGCE3                                                   00442001
0036D2 4540 593C             00984   5603=FGCF21    BAL   R4,ROUTINE1              FIND DISPL AND REG             00443001
0036D6 D201 C08A DA6A 036E8 00A6A    5604=          MVC   FGCF25+2(2),WPLACE       INSERT DISPLACEMENT IN CODE    00444001
0036DC D300 C08A DA72 036E8 00A72    5605=          MVZ   FGCF25+2(1),VPLACE       INSERT REG IN CODE             00445001
0036E2 4520 55A2             005EA   5606=          BAL   R2,GENTXT4               GENERATE 4 BYTES               00446001
0036E6 4180 0000             00000   5607=FGCF25    LA    ADR,0(0)                 *** GENERATED CODE ***         00447001
0036EA 91C0 9000       00000         5608=          TM    0(R9),X'C0'              IDENTIFIER FROM ITAB ?         00448001
0036EE 4710 C14A             037A8   5609=          BO    FGAF1                    YES                            00449001
0036F2 4B70 DA56             00A56   5610=          SH    R7,ONEENTRY              RELEASE STACK ENTRY            00450001
0036F6 47F0 C14A             037A8   5611=          B     FGAF1                    EXIT FROM LAPA                 00451001
                                     5612=*                                                                       00452001
0036FA 4540 59F2             00A3A   5613=FGCB3     BAL   R4,ROUTINE3              LOAD REG ADR                   00453001
0036FE 47F0 C14A             037A8   5614=          B     FGAF1                    EXIT FROM LAPA                 00454001
                                     5615=*                                                                       00455001
                                     5616=*         LABEL OR SWITCH IDENTIFIER                                    00456001
                                     5617=*                                                                       00457001
003702 4520 55A2             005EA   5618=FGCD3     BAL   R2,GENTXT4               GENERATE 4 BYTES               00458001
003706 588C 0000             00000   5619=FGCD34    L     ADR,0(LAT)               *** GENERATED CODE ***         00459001
00370A 4520 55A2             005EA   5620=          BAL   R2,GENTXT4               GENERATE 4 BYTES               00460001
00370E 589B 0000             00000   5621=FGCD35    L     GDSA,0(PBT)              *** GENERATED CODE ***         00461001
003712 47F0 C14A             037A8   5622=          B     FGAF1                    EXIT FROM LAPA                 00462001
                                     5623=*                                                                       00463001
                                     5624=*         PROCEDURE IDENTIFIER                                          00464001
                                     5625=*                                                                       00465001
003716 9140 9001       00001         5626=FGCE3     TM    1(R9),X'40'              STANDARD PROCEDURE ?           00466001
00371A 4780 C0F4             03752   5627=          BZ    FGCF4                    YES                            00467001
00371E 91F0 9003       00003         5628=          TM    3(R9),X'F0'              PARAMETERLESS PROCEDURE ?      00468001
003722 4780 C0DC             0373A   5629=          BZ    FGCF33                   YES                            00469001
003726 D200 C0ED 9002 0374B 00002    5630=          MVC   FGCF35+1(1),2(R9)                                       00470001
00372C 4120 C0E8             03746   5631=          LA    R2,FGCF34                                               00471001
003730 45E0 5588             005D0   5632=          BAL   R14,GENTXTS                                             00472001
003734 000C                          5633=          DC    H'12'                    GENERATE 12 BYTES              00473001
                                     5634=*                                                                       00474001
003736 47F0 C14A             037A8   5635=          B     FGAF1                    EXIT FROM LAPA                 00475001
                                     5636=*                                                                       00476001
00373A 9120 9001       00001         5637=FGCF33    TM    1(R9),X'20'              CALLED BY VALUE ?              00477001
00373E 4780 C14A             037A8   5638=          BZ    FGAF1                    NO                             00478001
003742 47F0 C074             036D2   5639=          B     FGCF21                   YES                            00479001
                                     5640=*                                                                       00480001
003746 588C 0000             00000   5641=FGCF34    L     ADR,0(LAT)               *** GENERATED CODE ***         00481001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

00374A 9200 D0A9      000A9       5642=FGCF35   MVI   PROLPBN(FSA),X'00'      *** GENERATED CODE ***          00482001
00374E 90BC D0A0            000A0 5643=         STM   PBT,LAT,PROLREG(FSA)    *** GENERATED CODE ***          00483001
                                  5644=*                                                                      00484001
                                  5645=*        STANDARD PROCEDURE IDENTIFIER                                 00485001
                                  5646=*                                                                      00486001
003752 9180 9004      00004       5647=FGCF4    TM    4(R9),X'80'             ABS, SIGN, LENGTH, OR ENT ?     00487001
003756 4710 C110            0376E 5648=         BO    FGCF41                  YES, NO LAT ENTRY               00488001
00375A 43F9 0004            00004 5649=         IC    R15,4(R9)               GET                             00489001
00375E 54F0 C306            03964 5650=         N     R15,FGXFC                   ENTRY                       00490001
003762 5AF0 D61C            0061C 5651=         A     R15,LATAB                         IN LAT                00491001
003766 947F F000      00000       5652=         NI    0(R15),X'7F'            INSERT ZERO BIT                 00492001
00376A 9601 DA40      00A40       5653=         OI    IOTAB+16,X'01'          ALL DATASETS MAY BE NEEDED      00493001
00376E 41F0 0002            00002 5654=FGCF41   LA    R15,2                                                   00494001
003772 14F6                       5655=         NR    R15,R6                  PRPOINT ON HALFWORD BOUNDARY ?  00495001
003774 4770 C120            0377E 5656=         BNZ   FGCF42                  YES                             00496001
003778 4520 559E            005E6 5657=         BAL   R2,GENTXT2              GENERATE 2 BYTES                00497001
00377C 1811                       5658=         LR    R1,R1                   *** GENERATED CODE ***          00498001
                                  5659=*                                      GENERATED NO OP CODE            00499001
00377E D203 C13E 9001 0379C 00001 5660=FGCF42   MVC   FGCF45(4),1(R9)         INSERT 1ST PART OF STD PROC ID  00500001
003784 4120 C134            03792 5661=         LA    R2,FGCF44                                               00501001
003788 45E0 5588            005D0 5662=         BAL   R14,GENTXTS                                             00502001
00378C 0016                       5663=         DC    H'22'                   GENERATE 22 BYTES               00503001
                                  5664=*                                                                      00504001
00378E 47F0 C14A            037A8 5665=         B     FGAF1                   EXIT FROM LAPA                  00505001
                                  5666=*                                                                      00506001
003792                            5667=         CNOP  2,4                                                     00507001
003792 05F0                       5668=FGCF44   BALR  BRR,0                   *** GENERATED CODE ***          00508001
003794 588F 0008            00008 5669=         L     ADR,8(BRR)              *** GENERATED CODE ***          00509001
003798 47FF 000C            0000C 5670=         B     12(BRR)                 *** GENERATED CODE ***          00510001
                                  5671=*                                                                      00511001
00379C 00000000                   5672=FGCF45   DC    F'0'                    *** GENERATED CODE ***          00512001
0037A0 9200 D0A9      000A9       5673=         MVI   PROLPBN(FSA),X'00'      *** GENERATED CODE ***          00513001
0037A4 90BC D0A0            000A0 5674=         STM   PBT,LAT,PROLREG(FSA)    *** GENERATED CODE ***          00514001
                                  5675=*                                                                      00515001
                                  5676=*        GENERATE CALL OF CAP2                                         00516001
                                  5677=*                                                                      00517001
0037A8 4520 55A2            005EA 5678=FGAF1    BAL   R2,GENTXT4              GENERATE 4 BYTES                00518001
0037AC 47FD 00D8            000D8 5679=         B     CAP2(FSA)               *** GENERATED CODE ***          00519001
0037B0 92FF DA61      00A61       5680=         MVI   GPBN+1,X'FF'            GDSA IS NOT CONTROLLED          00520001
0037B4 D201 9005 9000 00005 00000 5681=FGAG1    MVC   5(2,R9),0(R9)           PAR CHAR OF LO INTO NEXT L OPD  00521001
0037BA 5060 D5F8            005F8 5682=         ST    R6,WORKPL               NEXT THUNK ADDR                 00522001
0037BE D202 9002 D5F9 00002 005F9 5683=         MVC   2(3,R9),WORKPL+1        TO LAST OPD                     00523001
0037C4 48F0 C316            03974 5684=         LH    R15,STSLPAR             UPDATE SLPAR                    00524001
0037C8 41FF 0005            00005 5685=         LA    R15,5(R15)                                              00525001
0037CC 40F0 C316            03974 5686=         STH   R15,STSLPAR                                             00526001
0037D0 D201 9000 C316 00000 03974 5687=         MVC   0(2,R9),STSLPAR         SLPAR TO LAST OPERAND           00527001
                                  5688=*                                                                      00528001
0037D6 9526 8000      00000       5689=FGBA1    CLI   0(R8),XFRBRAC           RIGHT BRACKET IN SOURCE ?       00529001
0037DA 0775                       5690=         BNER  R5                      NO, BRANCH TO SUBSTART          00530001
0037DC 58F0 C312            03970 5691=         L     R15,STACKST             GET ADDR OF PROCED ID - 5       00531001
0037E0 9110 F005      00005       5692=         TM    5(R15),X'10'            PROCEDURE IDENTIFIER API ?      00532001
0037E4 4710 C1BA            03818 5693=         BO    FGBD1                   YES, NO PARAMETER NR CHECK      00533001
0037E8 1B44                       5694=         SR    R4,R4                                                   00534001
0037EA 434F 0008            00008 5695=         IC    R4,8(R15)               GET NUMBER OF PARM IN PROC IDENT 00535001
0037EE 8840 0004            00004 5696=         SRL   R4,4                                                    00536001
0037F2 4800 C316            03974 5697=         LH    R0,STSLPAR              GET NUMBER OF PARAMS TIMES FIVE 00537001
0037F6 8E00 0020            00020 5698=         SRDA  R0,32                                                   00538001
0037FA 4820 5170            001B8 5699=         LH    R2,KH5                                                  00539001
0037FE 1D02                       5700=         DR    R0,R2                   CALC NUMBER OF PARAMETERS       00540001
003800 4010 C310            0396E 5701=         STH   R1,FGOUTPAR+6           NUMBER TO GENERATED CODE        00541001
003804 1914                       5702=         CR    R1,R4                   PARAMETER COUNT COMPARE         00542001
003806 4780 C1BA            03818 5703=         BE    FGBD1                   CORRECT NUMBER                  00543001
00380A 9130 F006      00006       5704=         TM    6(R15),X'30'            PROCEDURE FORMAL PARAMETER ?    00544001
00380E 4740 C1BA            03818 5705=         BM    FGBD1                   YES, NO ERROR                   00545001
003812 4540 5380            003C8 5706=         BAL   R4,SERR1                                                00546001
003816 00BB                       5707=         DC    H'187'                  ERROR 187                       00547001
                                  5708=*                                                                      00548001
003818 5890 C312            03970 5709=FGBD1    L     R9,STACKST              CLEAR R9 FROM ALL PARAM ENTRY   00549001
00381C 4199 0005            00005 5710=         LA    R9,5(R9)                                                00550001
003820 940F 9003      00003       5711=         NI    3(R9),X'0F'             CLEAR PARAMETER COUNT           00551001
003824 9180 D080      00080       5712=         TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?             00552001
003828 4710 C2B6            03914 5713=         BO    FGBH1                   YES, BRANCH                     00553001
00382C 58F0 C312            03970 5714=         L     R15,STACKST             GET                             00554001
003830 D201 DA64 F003 00A64 00003 5715=         MVC   HALFW(2),3(R15)         ADDR OF                         00555001
003836 4840 DA64            00A64 5716=         LH    R4,HALFW                            LAT                 00556001
00383A 5A40 D61C            0061C 5717=         A     R4,LATAB                                ENTRY           00557001
00383E 5064 0000            00000 5718=         ST    R6,0(R4)                VALUE OF PRPOINT TO LAT ENTRY   00558001
                                  5719=*                                                                      00559001
                                  5720=*        GENERATE PROCEDURE CALL                                       00560001
                                  5721=*                                                                      00561001
003842 9130 9001      00001       5722=FGBD11   TM    1(R9),FORMPM            PROCEDURE FORMAL ?              00562001
003846 47B0 C1F4            03852 5723=         BNM   FGBD11A                 NO                              00563001
00384A 4520 55A2            005EA 5724=         BAL   R2,GENTXT4              GENERATE 4 BYTES                00564001
00384E 92FF D0A8      000A8       5725=         MVI   PROLPBN-1(FSA),X'FF'    *** GENERATED CODE ***          00565001
                                  5726=*                                                                      00566001
                                  5727=*        SET SW IN FSA TO DETECT WHEN ACT PROCEDURE IS                 00567001
                                  5728=*        PARAMETERLESS                                                 00568001
                                  5729=*                                                                      00569001
003852 9680 58B8      00900       5730=FGBD11A  OI    PROCWPS,X'80'           SET SWITCH IN OPERAND RECOGNIT  00570001
003856 4540 578A            007D2 5731=         BAL   R4,OPDREC                                               00571001
00385A 9780 58B8      00900       5732=         XI    PROCWPS,X'80'           SWITCH OFF                      00572001
00385E 943F 9001      00001       5733=         NI    1(R9),X'3F'             CLEAR PROCEDURE BITS            00573001
003862 9130 9001      00001       5734=         TM    1(R9),FORMPM            FORMAL PARAMETER ?              00574001
003866 47B0 C214            03872 5735=         BNM   FGBG1                   NO                              00575001
00386A 4520 55A2            005EA 5736=         BAL   R2,GENTXT4              GENERATE 4 BYTES                00576001
                                  5737=*                                      GENERATE CALL PROCEDURE FORMAL  00577001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                         X390 3.1.04  2012/08/17 13.13

00386E 45FD 00DC             000DC  5738=        BAL   BRR,PROLOGFP(FSA)      *** GENERATED CODE ***             00578001
003872 1BFF                         5739=FGBG1   SR    R15,R15                                                   00579001
003874 40F0 C318             03976  5740=        STH   R15,PARCOUNT           INITIALIZE PARAMETER COUNT         00580001
003878 48F0 C318             03976  5741=FGBG12  LH    R15,PARCOUNT                                              00581001
00387C 49F0 C316             03974  5742=        CH    R15,STSLPAR            ALL PARAMS BEEN PROCESSED ?        00582001
003880 4780 C2B6             03914  5743=        BE    FGBH1                  YES, BRANCH                        00583001
                                    5744=*                                                                       00584001
                                    5745=*       GENERATE ONE ENTRY IN PARAMETER LIST                            00585001
                                    5746=*                                                                       00586001
003884 41FF 0005             00005  5747=FGBG13  LA    R15,5(R15)                                                00587001
003888 40F0 C318             03976  5748=        STH   R15,PARCOUNT                                              00588001
00388C 5840 C312             03970  5749=        L     R4,STACKST             FIND PARAMETERS IN STACK           00589001
003890 1B4F                         5750=        SR    R4,R15                                                    00590001
003892 D201 C30E 4000 0396C 00000  5751=        MVC   FGOUTPAR+4(2),0(R4)    CHARACTER BYTES TO GENER CODE      00591001
003898 D202 C30B 4002 03969 00002  5752=        MVC   FGOUTPAR+1(3),2(R4)    ADDR OF THUNK TO GENER CODE        00592001
00389E 5060 C31A             03978  5753=        ST    R6,THUNKADR            SAVE PRPOINT FOR RLD RECORD        00593001
0038A2 4120 C30A             03968  5754=        LA    R2,FGOUTPAR                                               00594001
0038A6 45E0 5588             005D0  5755=        BAL   R14,GENTXTS                                               00595001
0038AA 0008                         5756=        DC    H'8'                   GENERATE 8 BYTES                   00596001
0038AC 5820 C31A             03978  5757=        L     R2,THUNKADR                                               00597001
0038B0 45E0 5574             005BC  5758=        BAL   R14,GENRLD             GENERATE RLD RECORD                00598001
0038B4 0004                         5759=        DC    H'4'                                                      00599001
0038B6 0001                         5760=        DC    H'1'                                                      00600001
0038B8 0001                         5761=        DC    H'1'                                                      00601001
0038BA 9200 C311       0396F        5762=        MVI   FGOUTPAR+7,0           ZERO TO NEXT PARM NUMBER FIELD     00602001
0038BE 47F0 C21A             03878  5763=        B     FGBG12                                                    00603001
                                    5764=*                                                                       00604001
                                    5765=*       CHECK FOR THE PRESENCE OF 'FOR', 'IF' OR 'GOTO'                 00605001
                                    5766=*       IMMEDIATELY AFTER PROCEDURE CALLS                               00606001
                                    5767=*       CALLED BY CP57 AND CP61                                         00607001
                                    5768=*                                                                       00608001
                                    5769=        DROP  R12                                                       00609001
0038C2 180C                         5770=FGBG20  LR    R0,R12                                                    00610001
0038C4 05C0                         5771=        BALR  R12,0                                                     00611001
                  R:C  038C6        5772=        USING *,R12                                                     00612001
0038C6 5000 C04A             03910  5773=        ST    R0,FGBG29              SAVE OLD BASE REG                  00613001
0038CA 5040 C046             0390C  5774=        ST    R4,FGBG28                                                 00614001
0038CE 952F 8001       00001        5775=        CLI   1(R8),XFZETA           SOURCE BUFFER EMPTY?               00615001
0038D2 4770 C014             038DA  5776=        BNE   FGBG22                 NO                                 00616001
0038D6 4540 5084             000CC  5777=        BAL   R4,JBUFFER                                                00617001
0038DA 9518 8001       00001        5778=FGBG22  CLI   1(R8),XFFOR            NEXT OPERATOR 'FOR' ?              00618001
0038DE 4780 C036             038FC  5779=        BE    FGBG27                 YES                                00619001
0038E2 951D 8001       00001        5780=        CLI   1(R8),XFIF             NEXT OPERATOR 'IF' ?               00620001
0038E6 4780 C036             038FC  5781=        BE    FGBG27                 YES                                00621001
0038EA 9517 8001       00001        5782=        CLI   1(R8),XFGOTO           NEXT OPERATOR 'GOTO' ?             00622001
0038EE 4780 C036             038FC  5783=        BE    FGBG27                 YES                                00623001
0038F2 5840 C046             0390C  5784=FGBG25  L     R4,FGBG28                                                 00624001
0038F6 58C0 C04A             03910  5785=        L     R12,FGBG29             RESTORE OLD BASE REG               00625001
0038FA 06A4                         5786=        BCTR  R10,R4                 CLOPT AND RETURN                   00626001
0038FC 4180 8001             00001  5787=FGBG27  LA    R8,1(,R8)              INCREASE SOURCE PTR                00627001
003900 4540 5318             00360  5788=        BAL   R4,SERR3                                                  00628001
003904 00C2                         5789=        DC    H'194'                 ERROR 194                          00629001
                                    5790=*                                                                       00630001
003906 4680 C02C             038F2  5791=        BCT   R8,FGBG25              DECREASE SOURCE PTR                00631001
                                    5792=*                                                                       00632001
00390A 0000
00390C 00000000                     5793=FGBG28  DC    F'0'                                                      00633001
003910 00000000                     5794=FGBG29  DC    F'0'                                                      00634001
                                    5795=        DROP  R12                                                       00635001
                                    5796=*                                                                       00636001
                                    5797=*       RE-ESTABLISH BASE REG FOR CONTINUATION OF CP57                  00637001
                                    5798=*                                                                       00638001
                  R:C  0365E        5799=        USING CP57,R12                                                  00639001
003914 4540 C264             038C2  5800=FGBH1   BAL   R4,FGBG20              CHECK NEXT OPERATOR                00640001
003918 9530 A000       00000        5801=        CLI   0(R10),X'30'           PROG CONTEXT OP IN STACK ?         00641001
00391C 4770 C2E2             03940  5802=        BNE   FGBG4                  NO, BRANCH                         00642001
003920 94FE D080       00080        5803=        NI    COMPFLGS,255-OPERAND   RESET OPERAND                      00643001
003924 58B0 5194             001DC  5804=        L     R11,DECAADD            SWITCH TO PROGRAM CONTEXT          00644001
003928 9180 9003       00003        5805=        TM    3(R9),REGADRM          OPERAND IN ADR ?                   00645001
00392C 4780 C2DA             03938  5806=        BZ    FGBH1A                 NO                                 00646001
003930 4B70 DA56             00A56  5807=        SH    R7,ONEENTRY            RELEASE STACK                      00647001
003934 9701 DA46       00A46        5808=        XI    RII,RIIADRM            ADR NOT OCCUPIED                   00648001
003938 4199 0005             00005  5809=FGBH1A  LA    R9,5(R9)               RELEASE PROCEDURE IDENT            00649001
00393C 46A0 503C             00084  5810=FGBK5   BCT   R10,SPECTEST           CLOPT, BRANCH TO SPECIAL TEST      00650001
003940 9533 A000       00000        5811=FGBG4   CLI   0(R10),X'33'           STMT CONTEXT OP IN STACK ?         00651001
003944 4780 C2DE             0393C  5812=        BE    FGBK5                  YES                                00652001
003948 58B0 51A0             001E8  5813=        L     R11,EXC                SWITCH TO EXPRESSION CONTEXT       00653001
00394C 46A0 503C             00084  5814=        BCT   R10,SPECTEST           CLOPT, BRANCH TO SPECIAL TEST      00654001
003950 4540 5318             00360  5815=FGAB2   BAL   R4,SERR3                                                  00655001
003954 00B0                         5816=        DC    H'176'                 ERROR 176                          00656001
                                    5817=*                                                                       00657001
003956 4540 5D02             00D4A  5818=        BAL   R4,STACKAPI            INSERT API                         00658001
00395A 9601 D080       00080        5819=        OI    COMPFLGS,OPERAND       SET OPERAND ON                     00659001
00395E 47F0 C000             0365E  5820=        B     CP57                                                      00660001
                                    5821=*                                                                       00661001
                                    5822=*       CONSTANTS AND WORKAREAS                                         00662001
                                    5823=*                                                                       00663001
003962 0000
003964                              5824=        DC    0F'0'                                                     00664001
003964 000000FC                     5825=FGXFC   DC    X'000000FC'            TO EXTRACT LN FROM OPERAND         00665001
003968 00000000                     5826=FGOUTPAR DC   F'0'                   *** GENERATED CODE ***             00666001
00396C 00000000                     5827=        DC    F'0'                   *** GENERATED CODE ***             00667001
003970 00000000                     5828=STACKST DC    F'0'                   PTR TO R9 ENTRY NEXT TO PROC       00668001
003974 0000                         5829=STSLPAR DC    H'0'                   NUMBER OF PARAMETERS TIMES FIVE    00669001
003976 0000                         5830=PARCOUNT DC   H'0'                   TEMPORARY STORAGE TO COUNT PARMS   00670001
003978 00000000                     5831=THUNKADR DC   F'0'                   TEMPORARY STORAGE                  00671001
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  Active USINGs: IEX50000+X'365E',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

                                     5832=*                                                                     00672001
                                     5833=********************************************************************* 00673001
                                     5834=*                                                                     00674001
                                     5835=*        COMPILER PROGRAM - CP61                                      00675001
                                     5836=*                                                                     00676001
                                     5837=********************************************************************* 00677001
                                     5838=*                                                                     00678001
                                     5839=*        CALL OF STANDARD PROCEDURES                                  00679001
                                     5840=*        CONTEXT             STATEMENT                                00680001
                                     5841=*        SOURCE OPERATOR     , OR )                                   00681001
                                     5842=*        STACK OPERATOR      STANDARD PROCEDURE BRACKET               00682001
                                     5843=*        OPERANDS            ACTUAL PARAMETER                         00683001
                                     5844=*                            PARAMETER COUNT AND PRPOINTER AT CALL    00684001
                                     5845=*                            PROCEDURE IDENTIFIER                     00685001
                                     5846=*                                                                     00686001
                   R:C  0397C        5847=         USING CP61,R12                                               00687001
00397C 4140 C008             03984   5848=CP61     LA    R4,FOC2                 OPERAND                        00688001
003980 4530 5F08             00F50   5849=         BAL   R3,OPDTEST                     TEST                    00689001
003984 4540 5E38             00E80   5850=FOC2     BAL   R4,MOVEOPDK                                            00690001
003988 D204 9000 9005 00000 00005    5851=         MVC   0(5,R9),5(R9)           COPY PARAMETER ENTRY           00691001
00398E 1B11                          5852=         SR    R1,R1                                                  00692001
003990 4319 000A             0000A   5853=         IC    R1,10(R9)                          -                   00693001
003994 4111 0004             00004   5854=         LA    R1,4(R1)                INCR PARAMETER COUNTER         00694001
003998 4219 000A             0000A   5855=         STC   R1,10(R9)                                              00695001
00399C 9110 900F       0000F         5856=         TM    15(R9),X'10'            PROCEDURE IDENTIFIER API       00696001
0039A0 4710 C05E             039DA   5857=         BO    FOF4                    YES, NO CHECKING               00697001
0039A4 D201 C7FC 9011 04178 00011    5858=         MVC   FOE2PCH(2),17(R9)       GET                            00698001
0039AA 4820 C7FC             04178   5859=         LH    R2,FOE2PCH                  PAR CHAR                   00699001
0039AE 8820 1000             00000   5860=         SRL   R2,0(R1)                            FROM               00700001
0039B2 4220 C7FC             04178   5861=         STC   R2,FOE2PCH                               PROCED IDENT  00701001
0039B6 4540 C0DA             03A56   5862=         BAL   R4,FQA2                 TEST TYPE                      00702001
0039BA 9103 9010       00010         5863=FOH2     TM    16(R9),X'03'            STAND FUNCTION HANDLED ?       00703001
0039BE 4770 C3E4             03D60   5864=         BNZ   FTB2                    YES                            00704001
0039C2 9180 D080       00080         5865=FOB4     TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?            00705001
0039C6 4710 C056             039D2   5866=         BO    FOD4                    YES, BRANCH                    00706001
0039CA 4540 C71E             0409A   5867=         BAL   R4,ADRTRANS             GENERATE ADDR TRANSFER         00707001
0039CE 4540 C1E0             03B5C   5868=FOC4     BAL   R4,FRA3                 CONSTRUCT FLAGS                00708001
0039D2 910F 9012       00012         5869=FOD4     TM    18(R9),X'0F'            SPECIAL ACTIONS REQUIRED ?     00709001
0039D6 4770 C296             03C12   5870=         BNZ   FSB1                    YES                            00710001
0039DA 4199 000A             0000A   5871=FOF4     LA    R9,10(R9)               RELEASE TWO ENTRIES IN OPDSTACK 00711001
0039DE 9525 8000       00000         5872=         CLI   0(R8),XFCOMMA           SOURCE A COMMA ?               00712001
0039E2 0785                          5873=         BER   R5                      YES, BRANCH TO SUBSTART        00713001
0039E4 1B11                          5874=FPA21    SR    R1,R1                                                  00714001
0039E6 4319 0000             00000   5875=         IC    R1,0(R9)                GET NUMBER OF PARAMETERS HANDLED 00715001
0039EA 9103 9009       00009         5876=         TM    9(R9),X'03'             HOW MANY INDICATED IN PROC ID ? 00716001
0039EE 4780 C082             039FE   5877=         BZ    FPA23                   ONE                            00717001
0039F2 4740 C07E             039FA   5878=         BM    FPA22                   TWO                            00718001
0039F6 4B10 516E             001B6   5879=         SH    R1,KH4                  THREE                          00719001
0039FA 4B10 516E             001B6   5880=FPA22    SH    R1,KH4                                                 00720001
0039FE 4B10 516E             001B6   5881=FPA23    SH    R1,KH4                                                 00721001
003A02 4770 C1CC             03B48   5882=         BNZ   FPA1                    ERROR IF NUMBER DOES NOT CHECK 00722001
003A06 9180 D080       00080         5883=FPB2     TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?            00723001
003A0A 4710 C096             03A12   5884=         BO    FPG2                    YES, BRANCH                    00724001
003A0E 4540 C6D4             04050   5885=         BAL   R4,LOADR1               GENERATE CALL OF STAND PROCEDURE 00725001
003A12 5830 C808             04184   5886=FPG2     L     R3,FGBGADR                                             00726001
003A16 0543                          5887=         BALR  R4,R3                   CHECK NEXT OPERATOR            00727001
003A18 9530 A000       00000         5888=         CLI   0(R10),X'30'            CHECK CONTEXT OPERATOR         00728001
003A1C 4770 C0B4             03A30   5889=         BNE   FPC5                    NOT PROGRAM CONTEXT            00729001
003A20 58B0 5194             001DC   5890=         L     R11,DECAADD             SWITCH TO PROGRAM CONTEXT      00730001
003A24 94FE D080       00080         5891=         NI    COMPFLGS,255-OPERAND    RESET OPERAND                  00731001
003A28 4199 000A             0000A   5892=         LA    R9,10(R9)               CLEAR TWO OPERANDS             00732001
003A2C 46A0 503C             00084   5893=FPG3     BCT   R10,SPECTEST            CLOPT, BRANCH TO SPECIAL TEST  00733001
003A30 9103 9006       00006         5894=FPC5     TM    6(R9),X'03'             STANDARD FUNCTION HANDLED ?    00734001
003A34 4770 C0C2             03A3E   5895=         BNZ   FPD5                    YES                            00735001
003A38 4540 5318             00360   5896=FPD4     BAL   R4,SERR3                NO, ERROR                      00736001
003A3C 00A8                          5897=         DC    H'168'                  ERROR 168                      00737001
                                     5898=*                                                                     00738001
003A3E 9533 A000       00000         5899=FPD5     CLI   0(R10),X'33'            STATEMENT CONTEXT ?            00739001
003A42 4780 C0CE             03A4A   5900=         BE    FPE4                    YES                            00740001
003A46 58B0 51A0             001E8   5901=         L     R11,EXC                 NO, SWITCH TO EXPR CONTEXT     00741001
003A4A 4199 000A             0000A   5902=FPE4     LA    R9,10(R9)               CLOPD TWICE                    00742001
003A4E 4540 5D02             00D4A   5903=         BAL   R4,STACKAPI             INTRODUCE API                  00743001
003A52 47F0 C0B0             03A2C   5904=         B     FPG3                                                   00744001
                                     5905=*                                                                     00745001
                                     5906=*        SUBROUTINE FOR TYPE TEST OF CURR PAR                         00746001
                                     5907=*                                                                     00747001
003A56 5040 C80C             04188   5908=FQA2     ST    R4,LOADR1R                                             00748001
003A5A 9110 9000       00000         5909=         TM    0(R9),X'10'             CHECK IF OPERAND IS API        00749001
003A5E 4710 C03E             039BA   5910=         BO    FOH2                    YES                            00750001
003A62 9108 9001       00001         5911=         TM    1(R9),X'08'             PAR LABEL ?                    00751001
003A66 4710 C1D6             03B52   5912=         BO    FQJ1                    YES                            00752001
003A6A 9103 C7FC       04178         5913=         TM    FOE2PCH,X'03'           STRING OR PROCEDURE ?          00753001
003A6E 4780 C130             03AAC   5914=         BZ    FQD3                    YES                            00754001
003A72 9104 9001       00001         5915=         TM    1(R9),X'04'             PARAMETER ARRAY IDENTIFIER ?   00755001
003A76 4710 C102             03A7E   5916=         BO    FQA2A                   YES, BYPASS NEXT TEST          00756001
003A7A 4540 5E9A             00EE2   5917=         BAL   R4,ARRTEST1             TEST FOR PROCEDURE IDENTIFIER  00757001
003A7E D700 C7FC 9001 04178 00001    5918=FQA2A    XC    FOE2PCH(1),1(R9)        COMP ACT PAR WITH CHAR FROM PRI 00758001
003A84 9107 C7FC       04178         5919=         TM    FOE2PCH,X'07'           TEST ARRAY AND TYPE BITS       00759001
003A88 5840 C80C             04188   5920=         L     R4,LOADR1R                                             00760001
003A8C 0784                          5921=         BZR   R4                      RETURN IF ZEROES               00761001
003A8E 4710 C1D6             03B52   5922=         BO    FQJ1                    ERROR IF ONESS                 00762001
003A92 9108 C7FC       04178         5923=         TM    FOE2PCH,X'08'           CALL BY NAME INDIC IN CHAR     00763001
003A96 4710 C1D6             03B52   5924=         BO    FQJ1                    YES, BRANCH TO ERROR           00764001
003A9A 9103 C7FC       04178         5925=         TM    FOE2PCH,X'03'           TEST TYPE BITS                 00765001
003A9E 47E0 C1D6             03B52   5926=         BNO   FQJ1                    ERROR IF ZEROES OR MIXED       00766001
003AA2 9103 9001       00001         5927=         TM    1(R9),X'03'             TEST TYPE OF PAR               00767001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

003AA6 47B0 C1D6              03B52  5928=         BNM   FQJ1              ERROR IF NOT ARITHM TYPE         00768001
003AAA 07F4                          5929=         BR    R4                RETURN                           00769001
                                     5930=*                                                                 00770001
003AAC 910C C7FC        04178        5931=FQD3     TM    FOE2PCH,X'0C'     STRING INDIC BY PROCEDURE ID ?   00771001
003AB0 4770 C142              03ABE  5932=         BNZ   FQE3              NO                               00772001
003AB4 9101 9000        00000        5933=         TM    0(R9),X'01'       PAR STRING ?                     00773001
003AB8 4780 C1D6              03B52  5934=         BZ    FQJ1              NO, ERROR                        00774001
003ABC 07F4                          5935=         BR    R4                RETURN                           00775001
                                     5936=*                                                                 00776001
003ABE 91C0 9001        00001        5937=FQE3     TM    1(R9),X'C0'       PAR PROCEDURE  ?                 00777001
003AC2 4780 C1D6              03B52  5938=         BZ    FQJ1              NO, ERROR                        00778001
003AC6 4710 C156              03AD2  5939=         BO    FQF3              IF PROCEDURE                     00779001
003ACA 9180 9001        00001        5940=         TM    1(R9),X'80'       PAR STAND PROCEDURE ?            00780001
003ACE 4710 C1D6              03B52  5941=         BO    FQJ1              YES, ERROR                       00781001
003AD2 9130 9001        00001        5942=FQF3     TM    1(R9),X'30'       PAR FORMAL PARAMETER ?           00782001
003AD6 47B0 C166              03AE2  5943=         BNM   FQG3              NO                               00783001
003ADA 9120 9001        00001        5944=         TM    1(R9),X'20'       YES, IS IT CALLED BY VALUE       00784001
003ADE 4710 C1D6              03B52  5945=         BO    FQJ1              ERROR IF YES                     00785001
003AE2 9180 D080        00080        5946=FQG3     TM    COMPFLGS,COMPMODE SYNTAX CHECK MODE ?              00786001
003AE6 4710 C05E              039DA  5947=         BO    FOF4              YES, BRANCH                      00787001
003AEA 9110 9001        00001        5948=         TM    1(R9),X'10'       FORMAL PAR CALLED BY NAME ?      00788001
003AEE 4710 C1C0              03B3C  5949=         BO    FQH4              YES                              00789001
003AF2 91E0 9003        00003        5950=         TM    3(R9),X'E0'       MORE THAN ONE PARAMETER ?        00790001
003AF6 4770 C1D6              03B52  5951=         BNZ   FQJ1              YES, ERROR                       00791001
003AFA 9110 9003        00003        5952=         TM    3(R9),X'10'       DOES IT HAVE ONE PARAMETER       00792001
003AFE 4780 C1D6              03B52  5953=         BZ    FQJ1              ERROR IF NOT                     00793001
003B02 D200 C1B3 9002 03B2F 00002    5954=         MVC   FQG35+1(1),2(R9)  PBN TO GENERATED CODE            00794001
003B08 D100 C1BE 9008 03B3A 00008    5955=         MVN   FQG36+4(1),8(R9)                                   00795001
003B0E D200 C1BF 9009 03B3B 00009    5956=         MVC   FQG36+5(1),9(R9)  MOVE LABEL NUMBER                00796001
003B14 4540 C7E2              0415E  5957=         BAL   R4,GETPARP                                         00797001
003B18 40F0 C1BC              03B38  5958=         STH   R15,FQG36+2       STORE DISP IN GENERATED CODE     00798001
003B1C 96A0 C1BC        03B38        5959=         OI    FQG36+2,X'A0'     REG CDSA TO GENERATED CODE       00799001
003B20 4120 C1B2              03B2E  5960=         LA    R2,FQG35                                           00800001
003B24 45E0 5588              005D0  5961=         BAL   R14,GENTXTS                                        00801001
003B28 000E                          5962=         DC    H'14'             GENERATE 14 BYTES                00802001
003B2A 47F0 C05E              039DA  5963=         B     FOF4                                               00803001
                                     5964=*                                                                 00804001
003B2E 9200 D0A9        000A9        5965=FQG35    MVI   PROLPBN(FSA),X'0' *** GENERATED CODE ***           00805001
003B32 90BC D0A0              000A0  5966=         STM   PBT,LAT,PROLREG(FSA) *** GENERATED CODE ***        00806001
003B36 D203 A000 C000 00000 00000    5967=FQG36    MVC   0(4,CDSA),0(LAT)  *** GENERATED CODE ***           00807001
                                     5968=*                                                                 00808001
003B3C 943F 9001        00001        5969=FQH4     NI    1(R9),X'3F'       REMOVE PROCEDURE BITS FOR OPDREC 00809001
003B40 4540 C71E              0409A  5970=         BAL   R4,ADRTRANS       ADDRESS TRANSFER (CALL ACT PAR)  00810001
003B44 47F0 C05E              039DA  5971=         B     FOF4                                               00811001
                                     5972=*                                                                 00812001
003B48 4540 5380              003C8  5973=FPA1     BAL   R4,SERR1          ERROR PATTERN ENTRIES            00813001
003B4C 00BB                          5974=         DC    H'187'            ERROR 187                        00814001
                                     5975=*                                                                 00815001
003B4E 47F0 C096              03A12  5976=         B     FPG2                                               00816001
                                     5977=*                                                                 00817001
003B52 4540 5380              003C8  5978=FQJ1     BAL   R4,SERR1                                           00818001
003B56 00BC                          5979=         DC    H'188'            ERROR 188                        00819001
                                     5980=*                                                                 00820001
003B58 47F0 C03E              039BA  5981=         B     FOH2                                               00821001
                                     5982=*                                                                 00822001
                                     5983=*        CONSTRUCT FLAGS                                          00823001
                                     5984=*                                                                 00824001
003B5C 9108 C7FC        04178        5985=FRA3     TM    FOE2PCH,X'08'     PROCEDURE SPECIFY 'NAME' ?       00825001
003B60 4780 C056              039D2  5986=         BZ    FOD4              NO                               00826001
003B64 9104 9001        00001        5987=         TM    1(R9),X'04'       CURRENT PARAMETER ARRAY ?        00827001
003B68 4710 C056              039D2  5988=         BO    FOD4              YES                              00828001
003B6C 9130 9001        00001        5989=         TM    1(R9),X'30'       FORMAL PAR                       00829001
003B70 47B0 C264              03BE0  5990=         BNM   FRF3              NO                               00830001
003B74 9120 9001        00001        5991=         TM    1(R9),X'20'       YES, CALLED BY NAME ?            00831001
003B78 4710 C264              03BE0  5992=         BO    FRF3              NO                               00832001
003B7C 4190 9005              00005  5993=         LA    R9,5(,R9)         ADJUST R9 FOR ROUT 1             00833001
003B80 4540 593C              00984  5994=         BAL   R4,ROUTINE1       GET ADDR OF FORMAL PARAMETER     00834001
003B84 4B90 5170              001B8  5995=         SH    R9,KH5            RESTORE R9                       00835001
003B88 4810 DA6A              00A6A  5996=         LH    R1,WPLACE         GET ADDR OF                      00836001
003B8C 4110 1004              00004  5997=         LA    R1,4(,R1)                     CHAR BYTES           00837001
003B90 4010 C224              03BA0  5998=         STH   R1,FRE24+2                               TO GEN C  00838001
003B94 D300 C224 DA72 03BA0 00A72    5999=         MVZ   FRE24+2(1),VPLACE                                  00839001
003B9A 4520 55A2              005EA  6000=         BAL   R2,GENTXT4        GENERATE 4 BYTES                 00840001
                                     6001=*                            GENERATE 'NO ASSIGNMENT TEST'        00841001
003B9E 9108 0000        00000        6002=FRE24    TM    0(0),X'08'        *** GENERATED CODE ***           00842001
003BA2 9102 9012        00012        6003=         TM    18(R9),X'02'      PROCEDURE IDENTIFIER SYSACT ?    00843001
003BA6 4710 C240              03BBC  6004=         BO    FRG2              YES                              00844001
003BAA 4520 55A2              005EA  6005=         BAL   R2,GENTXT4        NO, GENERATE BR TO OBJ T ERROR   00845001
003BAE 471D 0224              00224  6006=         BO    OERR22(FSA)       *** GENERATED CODE ***           00846001
003BB2 D200 9002 DA5D 00002 00A5D    6007=         MVC   2(1,R9),SPBNST+1  CURR PBN TO PARAMETER            00847001
003BB8 47F0 C056              039D2  6008=         B     FOD4                                               00848001
                                     6009=*                                                                 00849001
003BBC 4540 C7E2              0415E  6010=FRG2     BAL   R4,GETPARP        GET DISP IN OBJ TIME STACK       00850001
003BC0 40F0 C262              03BDE  6011=         STH   R15,FRG25+2       STORE IT IN GENERATED CODE       00851001
003BC4 96A0 C262        03BDE        6012=         OI    FRG25+2,X'A0'     INSERT REG NUMBER                00852001
003BC8 4120 C25A              03BD6  6013=         LA    R2,FRG24          GEN INSERTION OF NO-ASS-FLAG     00853001
003BCC 45E0 5588              005D0  6014=         BAL   R14,GENTXTS       IF PROC ID IS SYSACT             00854001
003BD0 000A                          6015=         DC    H'10'             GENERATE 10 BYTES                00855001
                                     6016=*                                                                 00856001
003BD2 47F0 C056              039D2  6017=         B     FOD4                                               00857001
                                     6018=*                                                                 00858001
003BD6 05E0                          6019=FRG24    BALR  R14,0             *** GENERATED CODE ***           00859001
003BD8 478E 0008              00008  6020=         BZ    8(R14)            *** GENERATED CODE ***           00860001
003BDC 9240 A000        00000        6021=FRG25    MVI   0(CDSA),X'40'     *** GENERATED CODE ***           00861001
                                     6022=*                                                                 00862001
003BE0 9108 9000        00000        6023=FRF3     TM    0(R9),X'08'       NO ASSIGNM FLAG IN PARAMETER ?   00863001
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  Active USINGs: IEX50000+X'397C',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code      Addr1 Addr2  Stmt    Source Statement                                  X390 3.1.04  2012/08/17 13.13

003BE4 4780 C056              039D2  6024=            BZ    FOD4                    NO                               00864001
003BE8 9102 9012        00012        6025=            TM    18(R9),X'02'            PROCEDURE ID SYSACT ?            00865001
003BEC 4780 C28C              03C08  6026=            BZ    FRH3                    NO, ERROR                        00866001
003BF0 4540 C7E2              0415E  6027=            BAL   R4,GETPARP              DISP IN OBJ T ST                 00867001
003BF4 40F0 C286              03C02  6028=            STH   R15,FRG45+2                               TO GENER CODE  00868001
003BF8 96A0 C286        03C02        6029=            OI    FRG45+2,X'A0'           INSERT REG NUMBER                00869001
003BFC 4520 55A2              005EA  6030=            BAL   R2,GENTXT4              GENERATE 4 BYTES                 00870001
                                     6031=*                                         GENER INSERTION OF NO-ASS-FLAG   00871001
003C00 9240 A000        00000        6032=FRG45       MVI   0(CDSA),X'40'           *** GENERATED CODE ***           00872001
003C04 47F0 C056              039D2  6033=            B     FOD4                                                     00873001
                                     6034=*                                                                          00874001
003C08 4540 5380              003C8  6035=FRH3        BAL   R4,SERR1                ERROR PATTERN ENTRY              00875001
003C0C 00BC                          6036=            DC    H'188'                  ERROR 188                        00876001
                                     6037=*                                                                          00877001
003C0E 47F0 C05E              039DA  6038=            B     FOF4                                                     00878001
                                     6039=*                                                                          00879001
                                     6040=*           SPECIAL ACTIONS, I/O PROCEDURES                                00880001
                                     6041=*                                                                          00881001
003C12 910C 9012        00012        6042=FSB1        TM    18(R9),X'0C'            INPUT OR OUTPUT ?                00882001
003C16 4780 C2F6              03C72  6043=            BZ    FSB3                    NEITHER, BRANCH                  00883001
003C1A 9504 900A        0000A        6044=            CLI   10(R9),X'04'            CURRENT PARAMETER THE FIRST ?    00884001
003C1E 4770 C05E              039DA  6045=            BNE   FOF4                    NO                               00885001
003C22 45E0 C39C              03D18  6046=            BAL   R14,FSSUBR              TEST RANGE OF DATASETNR ETC      00886001
                                     6047=*                                                                          00887001
                                     6048=*           MAKE INSERTION IN I/O TAB                                      00888001
                                     6049=*                                                                          00889001
003C26 9108 9012        00012        6050=FSD2        TM    18(R9),X'08'            INPUT ?                          00890001
003C2A 4780 C2CE              03C4A  6051=            BZ    FSD4                    NO                               00891001
003C2E 91FC 9001        00001        6052=            TM    1(R9),X'FC'             INTEGER CONST, 1ST TEST ?        00892001
003C32 4770 C2CA              03C46  6053=            BNZ   FSD3                    NO                               00893001
003C36 91C0 9000        00000        6054=            TM    0(R9),X'C0'             INTEGER CONST, 2ND TEST          00894001
003C3A 47E0 C2CA              03C46  6055=            BNO   FSD3                    NO                               00895001
003C3E 9504 9009        00009        6056=            CLI   9(R9),X'04'             DSN = 1 ?                        00896001
003C42 4780 C28C              03C08  6057=            BE    FRH3                    YES, ERROR                       00897001
003C46 9680 2000        00000        6058=FSD3        OI    0(R2),X'80'             NO, INDICATE INPUT               00898001
003C4A 9104 9012        00012        6059=FSD4        TM    18(R9),X'04'            OUTPUT ?                         00899001
003C4E 4780 C2F2              03C6E  6060=            BZ    FSD6                    NO                               00900001
003C52 91FC 9001        00001        6061=            TM    1(R9),X'FC'             INTEGER CONST, 1ST TEST ?        00901001
003C56 4770 C2EE              03C6A  6062=            BNZ   FSD5                    NO                               00902001
003C5A 91C0 9000        00000        6063=            TM    0(R9),X'C0'             INTEGER CONST, 2ND TEST          00903001
003C5E 47E0 C2EE              03C6A  6064=            BNO   FSD5                    NO                               00904001
003C62 9500 9009        00009        6065=            CLI   9(R9),X'00'             DSN = 0 ?                        00905001
003C66 4780 C28C              03C08  6066=            BE    FRH3                    YES, ERROR                       00906001
003C6A 9640 2000        00000        6067=FSD5        OI    0(R2),X'40'             NO, INDICATE OUTPUT              00907001
003C6E 47F0 C05E              039DA  6068=FSD6        B     FOF4                                                     00908001
                                     6069=*                                                                          00909001
003C72 9101 9012        00012        6070=FSB3        TM    18(R9),X'01'            PUT/GET ?                        00910001
003C76 4780 C302              03C7E  6071=            BZ    FSB3A                   NO                               00911001
003C7A 96FF DA41        00A41        6072=            OI    IOTAB+17,X'FF'          YES                              00912001
003C7E 9102 9012        00012        6073=FSB3A       TM    18(R9),X'02'            SYSACT ?                         00913001
003C82 4780 C05E              039DA  6074=            BZ    FOF4                    NO                               00914001
                                     6075=*                                                                          00915001
                                     6076=*           SPECIAL ACTIONS - SYSACT                                       00916001
                                     6077=*                                                                          00917001
003C86 9508 900A        0000A        6078=FSF3        CLI   10(R9),X'08'            TEST PARAMETER COUNT             00918001
003C8A 4720 C05E              039DA  6079=            BH    FOF4                    BRANCH IF THIRD PARAMETER        00919001
003C8E 4740 C38E              03D0A  6080=            BL    FSG4                    BRANCH IF FIRST PARAMETER        00920001
003C92 91FC 9001        00001        6081=            TM    1(R9),X'FC'             INTEGER CONST, 1ST TEST          00921001
003C96 4770 C326              03CA2  6082=            BNZ   FSF3A                   NO                               00922001
003C9A 91C0 9000        00000        6083=            TM    0(R9),X'C0'             INTEGER CONST, 2ND TEST          00923001
003C9E 4710 C342              03CBE  6084=            BO    FSJ2                    YES                              00924001
003CA2 9208 C7FE        0417A        6085=FSF3A       MVI   SYSACTF,X'08'           INDICATE UNDETERMINED FUNCTION   00925001
003CA6 1BFF                          6086=FSFJ35      SR    R15,R15                 GET                              00926001
003CA8 43F9 000B              0000B  6087=            IC    R15,11(R9)                  ENTRY                        00927001
003CAC 8AF0 0002              00002  6088=            SRA   R15,2                               IN                   00928001
003CB0 41FF DA30              00A30  6089=            LA    R15,IOTAB(R15)                         I/O TAB           00929001
003CB4 D600 F000 C7FE 00000 0417A    6090=            OC    0(1,R15),SYSACTF        INSERT SYSACT BIT                00930001
003CBA 47F0 C05E              039DA  6091=            B     FOF4                                                     00931001
                                     6092=*                                                                          00932001
003CBE 45E0 C39C              03D18  6093=FSJ2        BAL   R14,FSSUBR              INTEGER CONST TEST ETC           00933001
003CC2 9500 9004        00004        6094=            CLI   4(R9),X'00'             SYSACT FUNCTION ZERO?            00934001
003CC6 4780 C3C4              03D40  6095=            BE    FSE1                    YES, ERROR                       00935001
003CCA 9220 C7FE        0417A        6096=            MVI   SYSACTF,X'20'                                            00936001
003CCE 9510 9004        00004        6097=            CLI   4(R9),X'10'             FUNCTION = 4 ?                   00937001
003CD2 4780 C362              03CDE  6098=            BE    FSAA                    YES                              00938001
003CD6 9534 9004        00004        6099=            CLI   4(R9),X'34'             NO, FUNCTION = 13 ?              00939001
003CDA 4770 C36E              03CEA  6100=            BNE   FSBB                    NO                               00940001
                                     6101=*                                                                          00941001
                                     6102=*           FUNCTION IS 4 OR 13                                            00942001
                                     6103=*                                                                          00943001
003CDE 9504 900B        0000B        6104=FSAA        CLI   11(R9),X'04'            DSN = 0 OR 1 ?                   00944001
003CE2 47D0 C28C              03C08  6105=            BNH   FRH3                    YES, ERROR                       00945001
003CE6 47F0 C32A              03CA6  6106=            B     FSFJ35                  NO, OK                           00946001
                                     6107=*                                                                          00947001
003CEA 9520 9004        00004        6108=FSBB        CLI   4(R9),X'20'             FUNCTION = 8 ?                   00948001
003CEE 4780 C37E              03CFA  6109=            BE    FSBB1                   YES                              00949001
003CF2 9204 C7FE        0417A        6110=            MVI   SYSACTF,X'04'           NO, INDICATE OTHER FUNCTION      00950001
003CF6 47F0 C32A              03CA6  6111=            B     FSFJ35                                                   00951001
                                     6112=*                                                                          00952001
003CFA 9500 900B        0000B        6113=FSBB1       CLI   11(R9),X'00'            DSN = 0 ?                        00953001
003CFE 4780 C28C              03C08  6114=            BE    FRH3                    YES, ERROR                       00954001
003D02 9210 C7FE        0417A        6115=            MVI   SYSACTF,X'10'           NO, OK                           00955001
003D06 47F0 C32A              03CA6  6116=            B     FSFJ35                                                   00956001
                                     6117=*                                                                          00957001
                                     6118=*           HANDLE FIRST SYSACT PARAMETER                                  00958001
                                     6119=*                                                                          00959001
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  Active USINGs: IEX50000+X'397C',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

003D0A 45E0 C39C              03D18  6120=FSG4     BAL   R14,FSSUBR             CHECK OF INTEGER CONST ETC        00960001
003D0E D200 900B DA4D 0000B 00A4D  6121=           MVC   11(1,R9),OPDADR+1      STORE DATASETNUMBER IN PTR+1      00961001
003D14 47F0 C05E              039DA  6122=           B     FOF4                                                     00962001
                                     6123=*                                                                         00963001
                                     6124=*          CHECK PARAMETER                                                00964001
                                     6125=*                                                                         00965001
003D18 91FC 9001        00001        6126=FSSUBR   TM    1(R9),X'FC'            INTEGER CONST, 1ST TEST           00966001
003D1C 4770 C3CE              03D4A  6127=           BNZ   FSSUBR1                NO, BRANCH                        00967001
003D20 91C0 9000        00000        6128=           TM    0(R9),X'C0'            INTEGER CONST, 2ND TEST           00968001
003D24 47E0 C3CE              03D4A  6129=           BNO   FSSUBR1                NO, BRANCH                        00969001
003D28 91FF 9002        00002        6130=           TM    2(R9),X'FF'            CONST IN CONST POOL ZERO ?        00970001
003D2C 4770 C3C4              03D40  6131=           BNZ   FSE1                   ERROR IF NOT CONSTPOOL ZERO       00971001
003D30 4540 5CE8              00D30  6132=           BAL   R4,DECOMP              DECOMPOSE OPERAND                 00972001
003D34 48F0 DA4C              00A4C  6133=           LH    R15,OPDADR             GET DISP IN CONST POOL ZERO       00973001
003D38 8AF0 0006              00006  6134=           SRA   R15,6                                                    00974001
003D3C 4780 C3D2              03D4E  6135=           BZ    FSSUBR2                CONST < 16, BRANCH                00975001
003D40 4540 5380              003C8  6136=FSE1     BAL   R4,SERR1               ERROR IF NOT                      00976001
003D44 00BD                          6137=           DC    H'189'                 ERROR 189                         00977001
                                     6138=*                                                                         00978001
003D46 47F0 C05E              039DA  6139=           B     FOF4                                                     00979001
                                     6140=*                                                                         00980001
003D4A 9240 DA4D        00A4D        6141=FSSUBR1  MVI   OPDADR+1,X'40'         4*16 INTO OPDADR+1                00981001
003D4E 9200 DA4C        00A4C        6142=FSSUBR2  MVI   OPDADR,0               ZERO TO OPDADR FIRST BYTE         00982001
003D52 48F0 DA4C              00A4C  6143=           LH    R15,OPDADR                                               00983001
003D56 8AF0 0002              00002  6144=           SRA   R15,2                                                    00984001
003D5A 412F DA30              00A30  6145=           LA    R2,IOTAB(R15)          ADDR OF IOTAB ENTRY               00985001
003D5E 07FE                          6146=           BR    R14                    RETURN                            00986001
                                     6147=*                                                                         00987001
                                     6148=*          PROCESS ACTUAL PARAMETER FOR STANDARD FUNCTION PROCEDURE       00988001
                                     6149=*                                                                         00989001
003D60 9526 8000        00000        6150=FTB2     CLI   0(R8),XFRBRAC          SOURCE RIGHT BRACKET ?            00990001
003D64 4780 C3F4              03D70  6151=           BE    FTC2                   YES, BRANCH                       00991001
003D68 9680 D080        00080        6152=           OI    COMPFLGS,COMPMODE      SET SYNTAX CHECK MODE             00992001
003D6C 47F0 C05E              039DA  6153=           B     FOF4                                                     00993001
                                     6154=*                                                                         00994001
003D70 9180 D080        00080        6155=FTC2     TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?               00995001
003D74 4710 C05E              039DA  6156=           BO    FOF4                   YES                               00996001
003D78 06A0                          6157=           BCTR  R10,0                  NO, CLEAR ONE OPERATOR            00997001
003D7A 9533 A000        00000        6158=           CLI   0(R10),X'33'           TEST CONTEXT OPERATOR             00998001
003D7E 4740 C43C              03DB8  6159=           BL    FTD3                   PRC OPT, BRANCH                   00999001
003D82 4780 C40E              03D8A  6160=           BE    FTE1                   STC OPT, BRANCH                   01000001
003D86 58B0 51A0              001E8  6161=           L     R11,EXC                SWITCH TO EXPR CONTEXT            01001001
003D8A 06A0                          6162=FTE1     BCTR  R10,0                  CLOPT                             01002001
003D8C 9180 9013        00013        6163=           TM    19(R9),X'80'           ABS, SIGN, LENGTH, ENTIER ?       01003001
003D90 4780 C526              03EA2  6164=           BZ    FUB2                   NO                                01004001
003D94 4540 578A              007D2  6165=           BAL   R4,OPDREC              EXAMINE PARAMETER                 01005001
003D98 95E0 9013        00013        6166=           CLI   19(R9),X'E0'           PROCEDURE ID 'LENGTH' ?           01006001
003D9C 4780 C456              03DD2  6167=           BE    FTG1                   YES                               01007001
003DA0 95F0 9013        00013        6168=           CLI   19(R9),X'F0'           PROCURE 'ENTIER' ?                01008001
003DA4 4780 C53A              03EB6  6169=           BE    FUD1                   YES                               01009001
003DA8 9102 9001        00001        6170=FTH2     TM    1(R9),X'02'            PARAMETER OF TYPE REAL ?          01010001
003DAC 4710 C526              03EA2  6171=           BO    FUB2                   YES                               01011001
003DB0 4540 545E              004A6  6172=           BAL   R4,TRINRE              NO, GENERATE INTEGER REAL CONV    01012001
003DB4 47F0 C526              03EA2  6173=           B     FUB2                                                     01013001
                                     6174=*                                                                         01014001
003DB8 58B0 5194              001DC  6175=FTD3     L     R11,DECAADD            SWITCH TO PROGRAM CONTEXT         01015001
003DBC D201 DA64 900D 00A64 0000D  6176=           MVC   HALFW,13(R9)                                             01016001
003DC2 4870 DA64              00A64  6177=           LH    R7,HALFW               RESTORE OBJ TIME STACK PTR        01017001
003DC6 94FE D080        00080        6178=           NI    COMPFLGS,255-OPERAND   RESET OPERAND                     01018001
003DCA 4199 0014              00014  6179=           LA    R9,20(R9)              CLEAR FOUR OPERANDS               01019001
003DCE 46A0 503C              00084  6180=           BCT   R10,SPECTEST           CLOPT, BRANCH TO SPECIAL TEST     01020001
                                     6181=*                                                                         01021001
                                     6182=*          GENERATE CODE FOR 'LENGTH'                                     01022001
                                     6183=*                                                                         01023001
003DD2 4540 5CB4              00CFC  6184=FTG1     BAL   R4,ROUTIN15            LOAD VW-PLACE                     01024001
003DD6 D201 C494 DA6A 03E10 00A6A  6185=           MVC   FTG12+4(2),WPLACE      ADDR OF STRING TO GEN CODE        01025001
003DDC D300 C494 DA72 03E10 00A72  6186=           MVZ   FTG12+4(1),VPLACE                                        01026001
003DE2 4540 5AB0              00AF8  6187=           BAL   R4,ROUTINE7            FIND NEXT GPR                     01027001
003DE6 18FE                          6188=           LR    R15,R14                                                  01028001
003DE8 89E0 0004              00004  6189=           SLL   R14,4                  STORE                             01029001
003DEC 42E0 C497              03E13  6190=           STC   R14,FTG13+1                  REG NR                      01030001
003DF0 42E0 C49B              03E17  6191=           STC   R14,FTG13+5                         IN                   01031001
003DF4 42E0 C49D              03E19  6192=           STC   R14,FTG13+7                            GENER CODE        01032001
003DF8 16FE                          6193=           OR    R15,R14                                                  01033001
003DFA 42F0 C806              04182  6194=           STC   R15,FUOTRG             SAVE REG NUMBER USED              01034001
003DFE 4120 C490              03E0C  6195=           LA    R2,FTG12                                                 01035001
003E02 45E0 5588              005D0  6196=           BAL   R14,GENTXTS                                              01036001
003E06 000E                          6197=           DC    H'14'                  GENERATE 14 BYTES                 01037001
                                     6198=*                                                                         01038001
003E08 47F0 C6B6              04032  6199=           B     FUF1                                                     01039001
                                     6200=*                                                                         01040001
003E0C D201 D09C 0000 0009C 00000  6201=FTG12    MVC   HW(2,FSA),0(0)         *** GENERATED CODE ***            01041001
003E12 4800 D09C              0009C  6202=FTG13    LH    0,HW(0,FSA)            *** GENERATED CODE ***            01042001
003E16 0600                          6203=           BCTR  0,0                    *** GENERATED CODE ***            01043001
003E18 0600                          6204=           BCTR  0,0                    *** GENERATED CODE ***            01044001
                                     6205=*                                                                         01045001
                                     6206=*          GENERATE CODE FOR 'SIGN'                                       01046001
                                     6207=*                                                                         01047001
003E1A 4130 C4DC              03E58  6208=FTG3     LA    R3,FTG35               RETURN ADDR IF VALUE IN REG       01048001
003E1E 4540 5CB4              00CFC  6209=           BAL   R4,ROUTIN15            LOAD VW-PLACE IF NOT VAL IN REG   01049001
003E22 4540 5BBE              00C06  6210=           BAL   R4,ROUTIN11            FIND NEXT FPR                     01050001
003E26 18FE                          6211=           LR    R15,R14                REG                               01051001
003E28 89F0 0004              00004  6212=           SLL   R15,4                      NR                            01052001
003E2C 42F0 C4CF              03E4B  6213=           STC   R15,FTG31+1                    TO                        01053001
003E30 16FE                          6214=           OR    R15,R14                          GENER                   01054001
003E32 42F0 C4D7              03E53  6215=           STC   R15,FTG33+1                             CODE             01055001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

003E36 4540 5C08              00C50  6216=          BAL   R4,ROUTIN12             REG NOT OCCUPIED                 01056001
003E3A D201 C4D0 DA6A 03E4C 00A6A  6217=          MVC   FTG31+2(2),WPLACE                                        01057001
003E40 D300 C4D0 DA72 03E4C 00A72  6218=          MVZ   FTG31+2(1),VPLACE       ADDR TO GENER CODE               01058001
003E46 4520 5594              005DC  6219=          BAL   R2,GENTXTP4             GENERATE 4 BYTES                 01059001
003E4A 6800 0000              00000  6220=FTG31     LD    0,0(0)                  *** GENERATED CODE ***           01060001
003E4E 4520 5598              005E0  6221=FTG32     BAL   R2,GENTXTP2             GENERATE 2 BYTES                 01061001
003E52 2200                        6222=FTG33     LTDR  0,0                     *** GENERATED CODE ***           01062001
003E54 47F0 C4EA              03E66  6223=          B     FTH4                                                     01063001
                                   6224=*                                                                        01064001
003E58 D200 C4D7 DA72 03E53 00A72  6225=FTG35     MVC   FTG33+1(1),VPLACE       REG NUMBER TO GENER CODE         01065001
003E5E 4540 5C08              00C50  6226=          BAL   R4,ROUTIN12             REG NOT OCCUPIED                 01066001
003E62 47F0 C4D2              03E4E  6227=          B     FTG32                                                    01067001
                                   6228=*                                                                        01068001
003E66 4540 5AB0              00AF8  6229=FTH4      BAL   R4,ROUTINE7             FIND NEXT GPR                    01069001
003E6A 18FE                        6230=          LR    R15,R14                                                  01070001
003E6C 89E0 0004              00004  6231=          SLL   R14,4                                                    01071001
003E70 16FE                        6232=          OR    R15,R14                                                  01072001
003E72 42F0 C806              04182  6233=          STC   R15,FUOTRG              SAVER REG NUMBER                 01073001
003E76 42E0 C517              03E93  6234=          STC   R14,FTH42+3             REG                              01074001
003E7A 42E0 C51F              03E9B  6235=          STC   R14,FTH43+1                 NUMBER TO                    01075001
003E7E 42E0 C525              03EA1  6236=          STC   R14,FTH43+7                           GENER CODE         01076001
003E82 4120 C514              03E90  6237=          LA    R2,FTH42                                                 01077001
003E86 45E0 5588              005D0  6238=          BAL   R14,GENTXTS                                              01078001
003E8A 0012                        6239=          DC    H'18'                   GENERATE 18 BYTES                01079001
                                   6240=*                                                                        01080001
003E8C 47F0 C6B6              04032  6241=          B     FUF1                                                     01081001
                                   6242=*                                                                        01082001
003E90 05F0                        6243=FTH42     BALR  BRR,0                   *** GENERATED CODE ***           01083001
003E92 4100 0001              00001  6244=          LA    0,1                     *** GENERATED CODE ***           01084001
003E96 4720 F010              00010  6245=          BP    16(,BRR)                *** GENERATED CODE ***           01085001
003E9A 0600                        6246=FTH43     BCTR  0,0                     *** GENERATED CODE ***           01086001
003E9C 4780 F010              00010  6247=          BZ    16(,BRR)                *** GENERATED CODE ***           01087001
003EA0 0600                        6248=          BCTR  0,0                     *** GENERATED CODE ***           01088001
                                   6249=*                                                                        01089001
003EA2 9580 9013        00013        6250=FUB2      CLI   19(R9),X'80'            PROCEDURE ID 'ABS' ?             01090001
003EA6 4780 C604              03F80  6251=          BE    FUB3                    YES                              01091001
003EAA 95C0 9013        00013        6252=          CLI   19(R9),X'C0'            'SIGN' ?                         01092001
003EAE 4780 C49E              03E1A  6253=          BE    FTG3                    YES                              01093001
003EB2 47F0 C654              03FD0  6254=          B     FUD2                                                     01094001
                                   6255=*                                                                        01095001
                                   6256=*         GENERATE CALL OF 'ENTIER'                                      01096001
                                   6257=*                                                                        01097001
003EB6 9103 9001        00001        6258=FUD1      TM    1(R9),X'03'             OPERAND INTEGER ?                01098001
003EBA 47B0 C54A              03EC6  6259=          BNM   FUD12                                                    01099001
003EBE 9101 9001        00001        6260=          TM    1(R9),X'01'                                              01100001
003EC2 4710 C5DC              03F58  6261=          BO    FUD14                   YES                              01101001
003EC6 4130 C5A8              03F24  6262=FUD12     LA    R3,FUD13                RETURN ADDR IF VALUE IN REG      01102001
003ECA 4540 5CB4              00CFC  6263=          BAL   R4,ROUTIN15             LOAD VW-PLACE IF NOT VAL IN REG  01103001
003ECE 9101 DA49        00A49        6264=          TM    RIR+1,X'01'             FPR0 FREE ?                      01104001
003ED2 4780 C562              03EDE  6265=          BZ    FUD10                   YES                              01105001
003ED6 4540 5C64              00CAC  6266=          BAL   R4,ROUTIN14             NO, CLEAR IT                     01106001
003EDA 94FE DA49        00A49        6267=          NI    RIR+1,X'FE'             SET FPR0 NOT OCCUPIED            01107001
003EDE D201 C574 DA6A 03EF0 00A6A  6268=FUD10     MVC   FUD15+2(2),WPLACE                                        01108001
003EE4 D300 C574 DA72 03EF0 00A72  6269=          MVZ   FUD15+2(1),VPLACE       ADDR OF VALUE TO GEN CODE        01109001
003EEA 4520 5594              005DC  6270=          BAL   R2,GENTXTP4             GENERATE 4 BYTES                 01110001
003EEE 6800 0000              00000  6271=FUD15     LD    0,0(0,0)                *** GENERATED CODE ***           01111001
003EF2 4540 5AB0              00AF8  6272=FUD11     BAL   R4,ROUTINE7             INDICATE NEXT GPR                01112001
003EF6 18FE                        6273=          LR    R15,R14                                                  01113001
003EF8 89E0 0004              00004  6274=          SLL   R14,4                                                    01114001
003EFC 42E0 C5A3              03F1F  6275=          STC   R14,FUD16+1             REG NUMBER TO GEN CODE           01115001
003F00 960E C5A3        03F1F        6276=          OI    FUD16+1,X'0E'           REG R14 TO GEN CODE              01116001
003F04 16FE                        6277=          OR    R15,R14                                                  01117001
003F06 42F0 C806              04182  6278=          STC   R15,FUOTRG              SAVE REG NUMBER USED             01118001
003F0A 9101 DA46        00A46        6279=          TM    RII,X'01'               ADR FREE ?                       01119001
003F0E 4780 C59A              03F16  6280=          BZ    FUD17                   YES                              01120001
003F12 4540 5B46              00B8E  6281=          BAL   R4,ROUTIN10             NO, CLEAR IT                     01121001
003F16 4520 55A6              005EE  6282=FUD17     BAL   R2,GENTXT6              GENERATE 6 BYTES                 01122001
003F1A 458D 0140              00140  6283=          BAL   ADR,ENTIER(FSA)         *** GENERATED CODE ***           01123001
003F1E 180E                        6284=FUD16     LR    0,R14                   *** GENERATED CODE ***           01124001
003F20 47F0 C6B6              04032  6285=          B     FUF1                                                     01125001
                                   6286=*                                                                        01126001
003F24 91F0 9003        00003        6287=FUD13     TM    3(R9),X'F0'             VALUE IN FPR0 ?                  01127001
003F28 4780 C5D4              03F50  6288=          BZ    FUD18                   YES                              01128001
003F2C 9101 DA49        00A49        6289=          TM    RIR+1,X'01'             NO, FPR0 FREE ?                  01129001
003F30 4780 C5C0              03F3C  6290=          BZ    *+12                    YES                              01130001
003F34 4540 5C64              00CAC  6291=          BAL   R4,ROUTIN14             NO, CLEAR IT                     01131001
003F38 94FE DA49        00A49        6292=          NI    RIR+1,X'FE'             SET FPR0 NOT OCCUPIED            01132001
003F3C D100 C5CB DA72 03F47 00A72  6293=          MVN   FUD19+1(1),VPLACE       REG NUMBER TO GENER CODE         01133001
003F42 4520 5598              005E0  6294=          BAL   R2,GENTXTP2                                              01134001
003F46 2800                        6295=FUD19     LDR   0,0                     *** GENERATED CODE ***           01135001
003F48 4540 5C08              00C50  6296=          BAL   R4,ROUTIN12             REG NOT OCCUPIED                 01136001
003F4C 47F0 C576              03EF2  6297=          B     FUD11                                                    01137001
                                   6298=*                                                                        01138001
003F50 94FE DA49        00A49        6299=FUD18     NI    RIR+1,X'FE'             SET FPR0 NOT OCCUPIED            01139001
003F54 47F0 C576              03EF2  6300=          B     FUD11                                                    01140001
                                   6301=*                                                                        01141001
003F58 D204 900F 9000 0000F 00000  6302=FUD14     MVC   15(5,R9),0(R9)          PARAMETER IS INSERTED AS RESULT  01142001
003F5E 9140 9000        00000        6303=          TM    0(R9),X'40'             VALUE OR ADDR IN REG             01143001
003F62 4710 C6AE              0402A  6304=          BO    FUG3                    NO                               01144001
003F66 1B44                        6305=          SR    R4,R4                                                    01145001
003F68 4349 0003              00003  6306=          IC    R4,3(R9)                GET                              01146001
003F6C 8840 0004              00004  6307=          SRL   R4,4                        REG NUMBER                   01147001
003F70 8940 0002              00002  6308=          SLL   R4,2                    4 TIMES REG NUMBER               01148001
003F74 4190 900F              0000F  6309=          LA    R9,15(,R9)              ADJUST R9                        01149001
003F78 5094 D5C0              005C0  6310=          ST    R9,RUTI(R4)             INTRODUCE CORRECT R9 ADDR        01150001
003F7C 47F0 503C              00084  6311=          B     SPECTEST                BRANCH TO SPECIAL TEST           01151001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                          X390 3.1.04  2012/08/17 13.13

                                     6312=*                                                                        01152001
                                     6313=*         GENERATE CODE FOR 'ABS'                                        01153001
                                     6314=*                                                                        01154001
003F80 4130 C63E            03FBA    6315=FUB3      LA    R3,FUB4              RETURN ADDR IF VALUE IN REG         01155001
003F84 4540 5CB4            00CFC    6316=          BAL   R4,ROUTIN15          LOAD VW-PLACE IF NOT VAL IN REG     01156001
003F88 4540 5BBE            00C06    6317=          BAL   R4,ROUTIN11          FIND NEXT FPR                       01157001
003F8C 18FE                          6318=          LR    R15,R14                                                  01158001
003F8E 89F0 0004            00004    6319=          SLL   R15,4                                                    01159001
003F92 42F0 C631            03FAD    6320=          STC   R15,FUB31+1          REG NUMBER TO GEN CODE              01160001
003F96 16FE                          6321=          OR    R15,R14              SAVE REG NUMBER                     01161001
003F98 42F0 C806            04182    6322=          STC   R15,FUOTRG           IN TWO HALF BYTES                   01162001
003F9C D201 C632 DA6A 03FAE 00A6A    6323=          MVC   FUB31+2(2),WPLACE    ADDR OF VALUE TO GENER CODE         01163001
003FA2 D300 C632 DA72 03FAE 00A72    6324=          MVZ   FUB31+2(1),VPLACE                                        01164001
003FA8 4520 5594            005DC    6325=          BAL   R2,GENTXTP4          GENERATE 4 BYTES                    01165001
003FAC 6800 0000            00000    6326=FUB31     LD    0,0(0)               *** GENERATED CODE ***              01166001
003FB0 D200 C64F C806 03FCB 04182    6327=          MVC   FUB41+1(1),FUOTRG    REG NUMBER TO NEXT GENER INSTR      01167001
003FB6 47F0 C64A            03FC6    6328=          B     FUB42                                                    01168001
                                     6329=*                                                                        01169001
003FBA 43F0 DA72            00A72    6330=FUB4      IC    R15,VPLACE           REG NUMBER TO GENER CODE            01170001
003FBE 42F0 C64F            03FCB    6331=          STC   R15,FUB41+1                                              01171001
003FC2 42F0 C806            04182    6332=          STC   R15,FUOTRG           SAVE BYTE                           01172001
003FC6 4520 5598            005E0    6333=FUB42     BAL   R2,GENTXTP2          GENERATE 2 BYTES                    01173001
003FCA 2000                          6334=FUB41     LPDR  0,0                  *** GENERATED CODE ***              01174001
003FCC 47F0 C670            03FEC    6335=          B     FUF2                                                     01175001
                                     6336=*                                                                        01176001
                                     6337=*         GENERATE CALL FOR REMAINING FUNCTIONS                          01177001
                                     6338=*                                                                        01178001
003FD0 4540 C71E            0409A    6339=FUD2      BAL   R4,ADRTRANS          GENERATE ADDR TRANSFER              01179001
003FD4 4199 000A            0000A    6340=          LA    R9,10(R9)            ADJUST R9 FOR SUBROUTINE            01180001
003FD8 4540 C6D4            04050    6341=          BAL   R4,LOADR1            GEN LOAD OF PARREG AND FNC CALL     01181001
003FDC 4B90 5176            001BE    6342=          SH    R9,KH10              RESTORE R9                          01182001
003FE0 9200 C806      04182          6343=          MVI   FUOTRG,X'00'         INDICATE FPR0                       01183001
003FE4 9601 DA49      00A49          6344=          OI    RIR+1,X'01'          INDICATE FPR0 OCCUPIED              01184001
003FE8 9200 DA45      00A45          6345=          MVI   CIR+1,X'00'                                              01185001
                                     6346=*                                                                        01186001
                                     6347=*         A FLOATING POINT REG IS USED                                   01187001
                                     6348=*                                                                        01188001
003FEC 1BFF                          6349=FUF2      SR    R15,R15              GET                                 01189001
003FEE 43F0 C806            04182    6350=          IC    R15,FUOTRG           GET REG NUMBER USED                 01190001
003FF2 88F0 0004            00004    6351=          SRL   R15,4                                                    01191001
003FF6 89F0 0001            00001    6352=          SLL   R15,1                MULT BY 2                           01192001
003FFA 4110 900F            0000F    6353=          LA    R1,15(,R9)           ADDR OF OPERAND                     01193001
003FFE 501F D5E4            005E4    6354=          ST    R1,RUTR(R15)         TO RUTR                             01194001
                                     6355=*                                                                        01195001
                                     6356=*         REPLACE PROCEDURE ID BY RESULT                                 01196001
                                     6357=*                                                                        01197001
004002 D201 DA64 900D 00A64 0000D    6358=FUG2      MVC   HALFW,13(R9)         RESTORE OBJ TIME ST POINTER         01198001
004008 4870 DA64            00A64    6359=          LH    R7,HALFW                                                 01199001
00400C 4A70 DA56            00A56    6360=          AH    R7,ONEENTRY          ADD SIZE OF ONE ENTRY               01200001
004010 4070 C804            04180    6361=          STH   R7,FUOTSC+4          OBJ T STACK DISP TO GEN CODE        01201001
004014 D300 C804 C806 04180 04182    6362=          MVZ   FUOTSC+4(1),FUOTRG   INSERT REGISTER NUMBER              01202001
00401A D200 C803 DA5D 0417F 00A5D    6363=          MVC   FUOTSC+3(1),SPBNST+1 CURRENT PBN                         01203001
004020 D204 900F C801 0000F 0417D    6364=          MVC   15(5,R9),FUOTSC+1    INSERT OPERAND INTO STACK           01204001
004026 9232 C802      0417E          6365=          MVI   FUOTSC+2,X'32'       RESTORE TYPE 'REAL'                 01205001
00402A 4199 000F            0000F    6366=FUG3      LA    R9,15(R9)            CLEAR THREE OPERANDS                01206001
00402E 47F0 503C            00084    6367=          B     SPECTEST             BRANCH TO SPECIAL TEST              01207001
                                     6368=*                                                                        01208001
                                     6369=*         A GENERAL REGISTER IS USED                                     01209001
                                     6370=*                                                                        01210001
004032 9231 C802      0417E          6371=FUF1      MVI   FUOTSC+2,X'31'       INSERT TYPE 'INTEGER'               01211001
004036 1BFF                          6372=          SR    R15,R15              GET                                 01212001
004038 43F0 C806            04182    6373=          IC    R15,FUOTRG               REG                             01213001
00403C 88F0 0004            00004    6374=          SRL   R15,4                        NR                          01214001
004040 89F0 0002            00002    6375=          SLL   R15,2                MULTIPLY BY 4                       01215001
004044 4110 900F            0000F    6376=          LA    R1,15(,R9)           GET ADDR OF OPERAND                 01216001
004048 501F D5C0            005C0    6377=          ST    R1,RUTI(R15)         STORE ADDR IN RUTI                  01217001
00404C 47F0 C686            04002    6378=          B     FUG2                                                     01218001
                                     6379=*                                                                        01219001
                                     6380=*         GEN LOAD PARREG AND STAND PROC CALL                            01220001
                                     6381=*                                                                        01221001
004050 5040 C80C            04188    6382=LOADR1    ST    R4,LOADR1R           SAVE RETURN ADDR                    01222001
004054 9180 C807      04183          6383=          TM    FUOTFP,X'80'         FPR0 USED BUT NOT CLEARED ?         01223001
004058 4780 C6E8            04064    6384=          BZ    LOADR2               NO                                  01224001
00405C 947F C807      04183          6385=          NI    FUOTFP,X'7F'         RESET INDICATOR                     01225001
004060 4540 5706            0074E    6386=          BAL   R4,CLEARRG           SAVE ALL REGS                       01226001
004064 D201 DA64 9003 00A64 00003    6387=LOADR2    MVC   HALFW,3(R9)          GET                                 01227001
00406A 4870 DA64            00A64    6388=          LH    R7,HALFW                 ADDR OF                         01228001
00406E 48F0 DA56            00A56    6389=          LH    R15,ONEENTRY                     PARAMETER               01229001
004072 1AF7                          6390=          AR    R15,R7                                     LIST          01230001
004074 40F0 C70C            04088    6391=          STH   R15,FPB21+2          ADDR TO GENERATED CODE              01231001
004078 94FC 9009      00009          6392=          NI    9(R9),X'FC'          LAT DISP TO GENERATED CODE          01232001
00407C D200 C715 9009 04091 00009    6393=          MVC   FPB22+3(1),9(R9)                                         01233001
004082 4520 55A2            005EA    6394=          BAL   R2,GENTXT4           GENERATE 4 BYTES                    01234001
004086 411A 0000            00000    6395=FPB21     LA    R1,0(CDSA)           *** GENERATED CODE ***              01235001
00408A 4520 55A6            005EE    6396=          BAL   R2,GENTXT6           GENERATE 6 BYTES                    01236001
00408E 58FC 0000            00000    6397=FPB22     L     ENTRY,0(LAT)         *** GENERATED CODE ***              01237001
004092 05EF                          6398=          BALR  R14,ENTRY            *** GENERATED CODE ***              01238001
004094 5840 C80C            04188    6399=          L     R4,LOADR1R                                               01239001
004098 07F4                          6400=          BR    R4                                                       01240001
                                     6401=*                                                                        01241001
                                     6402=*         GENERATE TRANSFER OF PARAM ADDR                                01242001
                                     6403=*                                                                        01243001
00409A 5040 C80C            04188    6404=ADRTRANS  ST    R4,LOADR1R           SAVE RETURN ADDR                    01244001
00409E 4540 C7E2            0415E    6405=          BAL   R4,GETPARP           GET DISP IN OBJ T STACK FOR PAR     01245001
0040A2 40F0 C774            040F0    6406=          STH   R15,ADRTR2+2         DISP                                01246001
0040A6 40F0 C78C            04108    6407=          STH   R15,ADRTR4+2             TO                              01247001
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  Active USINGs: IEX50000+X'397C',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

0040AA 40F0 C7AE              0412A  6408=         STH   R15,ADRTR6+2                  GENERATED                01248001
0040AE 40F0 C7D0              0414C  6409=         STH   R15,ADRTR8+2                            CODE           01249001
0040B2 9102 9010        00010        6410=         TM    16(R9),X'02'        STANDARD FUNCTION HANDLED ?        01250001
0040B6 4780 C74E              040CA  6411=         BZ    ADRTR0              NO                                 01251001
0040BA 9102 9001        00001        6412=         TM    1(R9),X'02'         YES, PARAMETER OF TYPE REAL ?      01252001
0040BE 4710 C74E              040CA  6413=         BO    ADRTR0              YES                                01253001
0040C2 4540 578A              007D2  6414=         BAL   R4,OPDREC           NO, GENERATE CONVERSION            01254001
0040C6 4540 545E              004A6  6415=         BAL   R4,TRINRE                                              01255001
0040CA 4540 5DA8              00DF0  6416=ADRTR0   BAL   R4,LDVWPLC          LOAD VWPLACE                       01256001
0040CE 9120 9000        00000        6417=         TM    0(R9),X'20'         ADDR OR VALUE ?                    01257001
0040D2 4710 C77A              040F6  6418=         BO    ADRTR3              ADDR                               01258001
0040D6 D201 C76C DA6A 040E8 00A6A    6419=         MVC   ADRTR1+2(2),WPLACE  MOVE ADDR OF VALUE TO GEN CODE     01259001
0040DC D300 C76C DA72 040E8 00A72    6420=         MVZ   ADRTR1+2(1),VPLACE                                     01260001
0040E2 4520 55A2              005EA  6421=         BAL   R2,GENTXT4          GENERATE 4 BYTES                   01261001
0040E6 41E0 0000              00000  6422=ADRTR1   LA    R14,0(0)            *** GENERATED CODE ***             01262001
0040EA 4520 55A2              005EA  6423=         BAL   R2,GENTXT4          GENERATE 4 BYTES                   01263001
0040EE 50EA 0000              00000  6424=ADRTR2   ST    R14,0(CDSA)         *** GENERATED CODE ***             01264001
0040F2 47F0 C7B6              04132  6425=         B     ADRTR7                                                 01265001
                                     6426=*                                                                     01266001
0040F6 9680 C807        04183        6427=ADRTR3   OI    FUOTFP,X'80'        INDICATE ADDR FROM ADR             01267001
0040FA 95AA DA72        00A72        6428=ADRTR31  CLI   VPLACE,X'AA'        ADDR IN STACK ?                    01268001
0040FE 4780 C796              04112  6429=         BE    ADRTR5              YES                                01269001
004102 4520 55A2              005EA  6430=         BAL   R2,GENTXT4          GENERATE 4 BYTES                   01270001
004106 508A 0000              00000  6431=ADRTR4   ST    ADR,0(CDSA)         *** GENERATED CODE ***             01271001
00410A 4540 C7D8              04154  6432=         BAL   R4,RELADR           RELEASE REG ADR                    01272001
00410E 47F0 C7B2              0412E  6433=         B     ADRTR61                                                01273001
                                     6434=*                                                                     01274001
004112 D201 C7B0 DA6A 0412C 00A6A    6435=ADRTR5   MVC   ADRTR6+4(2),WPLACE  DISP IN STACK TO GENER CODE        01275001
004118 96A0 C7B0        0412C        6436=         OI    ADRTR6+4,X'A0'      REG CDSA TO GENERATED CODE         01276001
00411C 96A0 C7AE        0412A        6437=         OI    ADRTR6+2,X'A0'                                         01277001
004120 4B70 DA56              00A56  6438=         SH    R7,ONEENTRY         RELEASE STACK                      01278001
004124 4520 55A6              005EE  6439=         BAL   R2,GENTXT6          GENERATE 6 BYTES                   01279001
004128 D203 0000 0000 00000 00000    6440=ADRTR6   MVC   0(4,0),0(0)         *** GENERATED CODE ***             01280001
00412E 4540 5706              0074E  6441=ADRTR61  BAL   R4,CLEARRG          RESTORE ALL REGISTERS USED         01281001
004132 9103 9010        00010        6442=ADRTR7   TM    16(R9),X'03'        STAND FUNCTION HANDLED ?           01282001
004136 4770 C7D2              0414E  6443=         BNZ   ADRTR9              YES, CONV ALREADY MADE IF NEC      01283001
00413A 9103 C7FC        04178        6444=         TM    FOE2PCH,X'03'       CONVERSION NECESSARY ?             01284001
00413E 4780 C7D2              0414E  6445=         BZ    ADRTR9              NO                                 01285001
004142 96A0 C7D0        0414C        6446=         OI    ADRTR8+2,X'A0'      REG CDSA TO GENERATED CODE         01286001
004146 4520 55A2              005EA  6447=         BAL   R2,GENTXT4          GENERATE 4 BYTES                   01287001
00414A 9680 0000        00000        6448=ADRTR8   OI    0(0),X'80'          *** GENERATED CODE ***             01288001
00414E 5840 C80C              04188  6449=ADRTR9   L     R4,LOADR1R          LOAD RETURN ADDR                   01289001
004152 07F4                          6450=         BR    R4                                                     01290001
                                     6451=*                                                                     01291001
                                     6452=*        RELEASE OF REGISTER ADR                                      01292001
                                     6453=*                                                                     01293001
004154 4B70 DA56              00A56  6454=RELADR   SH    R7,ONEENTRY         RELEASE STACK                      01294001
004158 9701 DA46        00A46        6455=         XI    RII,RIIADRM         ADR NOT OCCUPIED                   01295001
00415C 07F4                          6456=         BR    R4                                                     01296001
                                     6457=*                                                                     01297001
                                     6458=*        COMPUTE OBJ TIME ST DISP FOR PARAMETER                       01298001
                                     6459=*                                                                     01299001
00415E D201 DA64 900D 00A64 0000D    6460=GETPARP  MVC   HALFW,13(R9)        GET STORED P-VALUE                 01300001
004164 1BFF                          6461=         SR    R15,R15                                                01301001
004166 43F9 000A              0000A  6462=         IC    R15,10(R9)          GET NR OF PARAMS TIMES FOUR        01302001
00416A 4AF0 DA64              00A64  6463=         AH    R15,HALFW           ADD TO STORED P                    01303001
00416E 4AF0 DA56              00A56  6464=         AH    R15,ONEENTRY        ADD SIZE OF ONE ENTRY              01304001
004172 4BF0 516E              001B6  6465=         SH    R15,KH4             SUBTRACT SIZE OF ONE PAR ENTRY     01305001
004176 07F4                          6466=         BR    R4                                                     01306001
                                     6467=*                                                                     01307001
                                     6468=*        CONSTANTS AND AREAS                                          01308001
                                     6469=*                                                                     01309001
004178 0000                          6470=FOE2PCH  DC    H'0'                SAVE PARAM CHAR FROM PROC ID       01310001
00417A 0000                          6471=SYSACTF  DC    H'0'                TEMPORARY STORE OF SYSACT FUNCT    01311001
00417C 0088                          6472=FUOTSC   DC    X'0088'             AREA TO BUILD                      01312001
00417E 3200                          6473=         DC    X'3200'                            OPD REPR            01313001
004180 0000                          6474=         DC    X'0000'                                     RESULT     01314001
004182 00                            6475=FUOTRG   DC    X'00'               REGISTER NUMBER USED               01315001
004183 00                            6476=FUOTFP   DC    X'00'               TO IND ADDR FROM ADR IF ST FUNC    01316001
004184 000038C2                      6477=FGBGADR  DC    A(FGBG20)                                              01317001
004188 00000000                      6478=LOADR1R  DC    F'0'                TO SAVE RETURN ADDR                01318001
                                     6479=*                                                                     01319001
                                     6480=********************************************************************** 01320001
                                     6481=*                                                                     01321001
                                     6482=*        COMPILER PROGRAM - CP64                                      01322001
                                     6483=*                                                                     01323001
                                     6484=********************************************************************** 01324001
                                     6485=*                                                                     01325001
                                     6486=*        OPENING BRACKET                                              01326001
                                     6487=*        CONTEXT              PROGRAM, STATEMENT, EXPRESSION          01327001
                                     6488=*        SOURCE OPERATOR      (                                       01328001
                                     6489=*        STACK OPERATOR       ANY                                     01329001
                                     6490=*        OPERAND              NONE OR PROCEDURE IDENTIFIER            01330001
                                     6491=*                                                                     01331001
                 R:C  0418C          6492=         USING CP64,R12                                               01332001
00418C 9101 D080        00080        6493=CP64     TM    COMPFLGS,OPERAND    OPERAND ON ?                       01333001
004190 4710 C01A              041A6  6494=         BO    GDAE1               YES, BRANCH                        01334001
004194 59B0 5194              001DC  6495=         C     R11,DECAADD         TEST CONTEXT                       01335001
004198 4770 C14A              042D6  6496=         BNE   GDAB3               NOT PROGRAM CONTEXT, BRANCH        01336001
00419C 4540 5318              00360  6497=         BAL   R4,SERR3            ERROR                              01337001
0041A0 00B0                          6498=         DC    H'176'              ERROR 176                          01338001
                                     6499=*                                                                     01339001
0041A2 4540 5D02              00D4A  6500=         BAL   R4,STACKAPI         API TO OPERAND STACK               01340001
0041A6 4540 5E30              00E78  6501=GDAE1    BAL   R4,MOVEOPTK         CURRENT CONTEXT OPERATOR TO R10    01341001
0041AA D200 A000 B063 00000 00063    6502=         MVC   0(1,R10),99(R11)                                       01342001
0041B0 59B0 5194              001DC  6503=         C     R11,DECAADD         PROGRAM CONTEXT ?                  01343001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

0041B4 4780 C046             041D2  6504=           BE    GDAG1                 YES                            01344001
0041B8 9110 9000       00000        6505=           TM    0(R9),X'10'           PROC API ?                     01345001
0041BC 4710 C046             041D2  6506=           BO    GDAG1                 YES                            01346001
0041C0 9103 9001       00001        6507=           TM    1(R9),X'03'           'TYPE' PROCEDURE ?             01347001
0041C4 4770 C046             041D2  6508=           BNZ   GDAG1                 YES                            01348001
0041C8 4540 5318             00360  6509=           BAL   R4,SERR3              NO, ERROR                      01349001
0041CC 00A8                         6510=           DC    H'168'                ERROR 168                      01350001
                                    6511=*                                                                     01351001
0041CE 47F0 C058             041E4  6512=           B     GDAH11                                               01352001
                                    6513=*                                                                     01353001
0041D2 58B0 519C             001E4  6514=GDAG1      L     R11,STC               SWITCH TO STATEMENT CONTEXT    01354001
0041D6 91C0 9001       00001        6515=GDAH1      TM    1(R9),X'C0'           OPERAND PROCEDURE IDENTIFIER ? 01355001
0041DA 4770 C060             041EC  6516=           BNZ   GDAJ1                 YES                            01356001
0041DE 4540 5318             00360  6517=           BAL   R4,SERR3              NO, ERROR                      01357001
0041E2 00B7                         6518=           DC    H'183'                ERROR 183                      01358001
                                    6519=*                                                                     01359001
0041E4 4540 5E38             00E80  6520=GDAH11     BAL   R4,MOVEOPDK           GET ONE R9 ENTRY               01360001
0041E8 47F0 C092             0421E  6521=           B     GDBC2                                                01361001
                                    6522=*                                                                     01362001
0041EC 4540 5E38             00E80  6523=GDAJ1      BAL   R4,MOVEOPDK           GET ONE R9 ENTRY               01363001
0041F0 9140 9006       00006        6524=           TM    6(R9),X'40'           STANDARD PROCEDURE ?           01364001
0041F4 4780 C102             0428E  6525=           BZ    GDCA1                 YES                            01365001
0041F8 9110 9005       00005        6526=GDBA1      TM    5(R9),X'10'           PROC API ?                     01366001
0041FC 4710 C098             04224  6527=           BO    GDBA3                 YES                            01367001
004200 91F0 9008       00008        6528=           TM    8(R9),X'F0'           NUMBER OF PARAMETERS ZERO ?    01368001
004204 4770 C0E0             0426C  6529=           BNZ   GDBA2                 NO                             01369001
004208 9130 9006       00006        6530=           TM    6(R9),X'30'           IS PROCED FORMAL PARAMETER     01370001
00420C 47B0 C08C             04218  6531=           BNM   GDBA1A                NO, ERROR                      01371001
004210 9110 9006       00006        6532=           TM    6(R9),X'10'           CALLED BY NAME                 01372001
004214 4710 C098             04224  6533=           BO    GDBA3                 YES, OK                        01373001
004218 4540 5380             003C8  6534=GDBA1A     BAL   R4,SERR1                                             01374001
00421C 00BB                         6535=           DC    H'187'                ERROR 187                      01375001
                                    6536=*                                                                     01376001
                       0421E        6537=GDBB15     EQU   *                                                    01377001
00421E D204 9005 5182 00005 001CA   6538=GDBC2      MVC   5(5,R9),API           API REPLACES NEXT LAST ST ENTRY 01378001
004224 4540 5E38             00E80  6539=GDBA3      BAL   R4,MOVEOPDK           INCR OPERAND STACK             01379001
004228 4540 5E70             00EB8  6540=GDBA4      BAL   R4,LATRES             RESERVE ONE LAT ENTRY          01380001
00422C D201 9008 D0A2 00008 000A2   6541=GDBB4      MVC   8(2,R9),LN            LN TO R9                       01381001
004232 D201 9000 DA50 00000 00A50   6542=           MVC   0(2,R9),ZEROHW        SET PARAM NUMBER TO ZERO       01382001
004238 9180 D080       00080        6543=           TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?            01383001
00423C 4710 C0CC             04258  6544=           BO    GDBH4                 YES, BRANCH                    01384001
004240 4540 5706             0074E  6545=           BAL   R4,CLEARRG            STORE ALL REGS USED            01385001
004244 D201 C0C4 D0A2 04250 000A2   6546=           MVC   GDBG45+2(2),LN        GENERATE BRANCH PAST THUNKS    01386001
00424A 4520 55A2             005EA  6547=           BAL   R2,GENTXT4            GENERATE 4 BYTES               01387001
00424E 588C 0000             00000  6548=GDBG45     L     ADR,0(LAT)            *** GENERATED CODE ***         01388001
004252 4520 559E             005E6  6549=           BAL   R2,GENTXT2            GENERATE 2 BYTES               01389001
004256 07F8                         6550=           BR    ADR                   *** GENERATED CODE ***         01390001
004258 5060 D5F8             005F8  6551=GDBH4      ST    R6,WORKPL                                            01391001
00425C D202 9002 D5F9 00002 005F9   6552=           MVC   2(3,R9),WORKPL+1      PRPOINT TO R9                  01392001
004262 9229 A001       00001        6553=           MVI   1(R10),XFDELTA        PROCEDURE BRACKET TO R10       01393001
004266 4540 5E30             00E78  6554=GDBH42     BAL   R4,MOVEOPTK           INCREASE R10                   01394001
00426A 07F5                         6555=           BR    R5                    BRANCH TO SUBSTART             01395001
                                    6556=*                                                                     01396001
00426C 91C0 9005       00005        6557=GDBA2      TM    5(R9),X'C0'           OPND IN REG OR OBJ TIME ST ?   01397001
004270 4740 C098             04224  6558=           BM    GDBA3                 YES (NOT FORMAL PARAMETER)     01398001
004274 9130 9006       00006        6559=           TM    6(R9),X'30'           OPND FORMAL PARAMETER ?        01399001
004278 47B0 C098             04224  6560=           BNM   GDBA3                 NO                             01400001
00427C 9120 9006       00006        6561=           TM    6(R9),X'20'           YES, CALLED BY VALUE ?         01401001
004280 4780 C098             04224  6562=           BZ    GDBA3                 NO                             01402001
004284 4540 5380             003C8  6563=GDBB2      BAL   R4,SERR1              YES, ERROR                     01403001
004288 00AE                         6564=           DC    H'174'                ERROR 174                      01404001
                                    6565=*                                                                     01405001
00428A 47F0 C092             0421E  6566=           B     GDBB15                                               01406001
                                    6567=*                                                                     01407001
                                    6568=*          OPERAND IS STANDARD PROCEDURE ID                           01408001
                                    6569=*                                                                     01409001
00428E 9180 D080       00080        6570=GDCA1      TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?            01410001
004292 4710 C13C             042C8  6571=           BO    GDCG1                 YES, BRANCH                    01411001
004296 9180 9009       00009        6572=           TM    9(R9),X'80'           ABS, SIGN, LENGTH, ENTIER ?    01412001
00429A 4710 C122             042AE  6573=           BO    GDCC1                 YES                            01413001
00429E 43F9 0009             00009  6574=           IC    R15,9(R9)             MOVE 0-BIT                     01414001
0042A2 54F0 C15C             042E8  6575=           N     R15,HEXFC                        INTO                01415001
0042A6 5AF0 D61C             0061C  6576=           A     R15,LATAB                             CORR           01416001
0042AA 947F F000       00000        6577=           NI    0(R15),X'7F'                               LAT ENTRY 01417001
0042AE 4070 DA64             00A64  6578=GDCC1      STH   R7,HALFW              STORE P-VALUE IN R9            01418001
0042B2 D201 9003 DA64 00003 00A64   6579=           MVC   3(2,R9),HALFW                                        01419001
0042B8 4A70 DA56             00A56  6580=           AH    R7,ONEENTRY           RESERVE SPACE FOR PARAM-LIST   01420001
0042BC 4177 0008             00008  6581=           LA    R7,8(R7)                                             01421001
0042C0 4070 D5F8             005F8  6582=           STH   R7,WORKPL             CHECK FOR P-OVERFLOW           01422001
0042C4 4540 58BA             00902  6583=           BAL   R4,MAXCH                                             01423001
0042C8 D201 9000 DA50 00000 00A50   6584=GDCG1      MVC   0(2,R9),ZEROHW        ZERO PARAM COUNT FIELD         01424001
0042CE 922A A001       00001        6585=           MVI   1(R10),X'2A'          STAND PROCEDURE BRACKET TO R10 01425001
0042D2 47F0 C0DA             04266  6586=           B     GDBH42                                               01426001
                                    6587=*                                                                     01427001
0042D6 58B0 51A0             001E8  6588=GDAB3      L     R11,EXC               SWITCH TO EXPR CONTEXT         01428001
0042DA 4540 5E30             00E78  6589=           BAL   R4,MOVEOPTK           SOURCE OPERATOR TO STACK       01429001
0042DE D200 A000 8000 00000 00000   6590=           MVC   0(1,R10),0(R8)                                       01430001
0042E4 07F5                         6591=           BR    R5                    BRANCH TO SUBSTART             01431001
                                    6592=*                                                                     01432001
                                    6593=*          CONSTANT                                                   01433001
                                    6594=*                                                                     01434001
0042E6 0000
0042E8                              6595=           DC    0F'0'                                                01435001
0042E8 000000FC                     6596=HEXFC      DC    X'000000FC'           EXTRACT DISP IN LAT            01436001
                                    6597=*                                                                     01437001
                                    6598=*********************************************************************** 01438001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                   6599=*                                                                          01439001
                                   6600=*        COMPILER PROGRAM - CP71                                           01440001
                                   6601=*                                                                          01441001
                                   6602=*********************************************************************** 01442001
                                   6603=*                                                                          01443001
                                   6604=*        STATEMENT END                                                     01444001
                                   6605=*        CONTEXT              STATEMENT                                    01445001
                                   6606=*        SOURCE OPERATOR      EPSILON, ETA, END, ELSE, ;, S.E. STC         01446001
                                   6607=*                             (SEE MATRIX)                                 01447001
                                   6608=*        STACK OPERATOR       S.E. STC (SEE MATRIX)                        01448001
                                   6609=*        OPERAND              NOT DECISIVE                                 01449001
                                   6610=*                                                                          01450001
                 R:C  042EC        6611=         USING CP71,R12                                                    01451001
0042EC 58B0 5194            001DC  6612=CP71     L      R11,DECAADD            SWITCH TO PROGRAM CONTEXT           01452001
0042F0 47F0 5060            000A8  6613=         B      COMP                   GOTO COMP                           01453001
                                   6614=*                                                                          01454001
                                   6615=*********************************************************************** 01455001
                                   6616=*                                                                          01456001
                                   6617=*        COMPILER PROGRAM - CP84                                           01457001
                                   6618=*                                                                          01458001
                                   6619=*********************************************************************** 01459001
                                   6620=*                                                                          01460001
                                   6621=*        NOT PERMITTED OPERATOR PAIR                                       01461001
                                   6622=*        SOURCE AND STACK OPERATOR      SEE MATRIXES                       01462001
                                   6623=*        OPERAND                        NONE OR ONE                        01463001
                                   6624=*                                                                          01464001
                 R:C  042F4        6625=         USING CP84,R12                                                    01465001
0042F4 4540 5380            003C8  6626=CP84     BAL    R4,SERR1               TERMINATING ERROR                   01466001
0042F8 00AD                        6627=         DC     H'173'                 ERROR 173                           01467001
                                   6628=*                                                                          01468001
0042FA 47F0 541A            00462  6629=         B      CPERR1                 BRANCH TO TERMINATION               01469001
                                   6630=*                                                                          01470001
                                   6631=*********************************************************************** 01471001
                                   6632=*                                                                          01472001
                                   6633=*        END OF IEX50004                                                   01473001
                                   6634=*                                                                          01474001
                                   6635=*********************************************************************** 01475001
                                   6636=*                                                                          01476001
                                   6637          COPY   IEX50005               IEX50005                            01935001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   6639=*                                                                 00002001
                                   6640=*        CP17, CP18, CP26, CP27, CP28, CP29, CP30, CP31, CP63,    00003001
                                   6641=*        CP65, CP66, CP67, CP68, CP70, CP72, CP73, CP74, CP75,    00004001
                                   6642=*        CP76, CP77, CP78, CP79, CP80, CP86, CP87                 00005001
                                   6643=*                                                                 00006001
                                   6644=********************************************************************** 00007001
                                   6645=*                                                                 00008001
                                   6646=*        COMPILER PROGRAM - CP17                                  00009001
                                   6647=*                                                                 00010001
                                   6648=********************************************************************** 00011001
                                   6649=*                                                                 00012001
                                   6650=*        IF STATEMENT WITH ALTERNATIVE                            00013001
                                   6651=*        CONTEXT             PROGRAM                              00014001
                                   6652=*        SOURCE OPERATOR     ELSE                                 00015001
                                   6653=*        STACK OPERATOR      THENS                                00016001
                                   6654=*        OPERANDS            CASE I)   LABEL NUMBER               00017001
                                   6655=*                            CASE II)  PROCEDURE IDENTIFIER       00018001
                                   6656=*                                      LABEL NUMBER               00019001
                                   6657=*                                                                 00020001
                  R:C  042FE       6658=         USING CP17,R12                                           00021001
0042FE 9101 D080       00080       6659=CP17     TM    COMPFLGS,OPERAND        OPERAND ON ?               00022001
004302 4780 C010             0430E 6660=         BZ    BCB2                    NO, BRANCH                 00023001
004306 4540 5D54             00D9C 6661=         BAL   R4,PLPRST               BRANCH TO PLPRST HANDLE    00024001
00430A 4190 9005             00005 6662=         LA    R9,5(,R9)               CLOPD                      00025001
00430E 9228 A000       00000       6663=BCB2     MVI   0(R10),X'28'            STACK 'ELSES'              00026001
004312 92FF DA61       00A61       6664=         MVI   GPBN+1,X'FF'            DESTROY GLOBAL PBN         00027001
004316 9180 D080       00080       6665=         TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?        00028001
00431A 0715                        6666=         BOR   R5                      YES, RETURN TO SUBSTART    00029001
00431C 4540 5E70             00EB8 6667=         BAL   R4,LATRES               RESERVE LABEL              00030001
004320 D201 C02E D0A2 0432C 000A2  6668=         MVC   BCD2+2(2),LN            INTR LABEL NO AS DISPLACEMENT 00031001
004326 4520 55A6             005EE 6669=         BAL   R2,GENTXT6              GENERATE 6 BYTES           00032001
00432A 58FC 0000             00000 6670=BCD2     L     BRR,0(LAT,0)            *** GENERATED CODE ***     00033001
00432E 07FF                        6671=         BR    BRR                     *** GENERATED CODE ***     00034001
004330 5810 D61C             0061C 6672=         L     R1,LATAB                LOAD ADDR OF LAT           00035001
004334 D201 D5F8 9003 005F8 00003  6673=         MVC   WORKPL(2),3(R9)         LOAD LABEL NUMBER          00036001
00433A 4820 D5F8             005F8 6674=         LH    R2,WORKPL                                          00037001
00433E 5061 2000             00000 6675=         ST    R6,0(R1,R2)             STORE PRPOINTER INTO LAT   00038001
004342 D201 9003 D0A2 00003 000A2  6676=         MVC   3(2,R9),LN              KEEP NEW LABEL             00039001
004348 07F5                        6677=         BR    R5                      RETURN TO SUBSTART         00040001
                                   6678=*                                                                 00041001
                                   6679=********************************************************************** 00042001
                                   6680=*                                                                 00043001
                                   6681=*        COMPILER PROGRAM - CP83                                  00044001
                                   6682=*                                                                 00045001
                                   6683=********************************************************************** 00046001
                                   6684=*                                                                 00047001
                                   6685=*        CODE PROCEDURE DECLARATION (IN CALLING PROGRAM)          00048001
                                   6686=*        CONTEXT             PROGRAM                              00049001
                                   6687=*        SOURCE OPERATOR     GAMMA                                00050001
                                   6688=*        STACK OPERATOR      PI, PHI, BETA                        00051001
                                   6689=*        OPERANDS            LABEL NUMBER                         00052001
                                   6690=*                            PROCEDURE IDENTIFIER                 00053001
                                   6691=*                                                                 00054001
                  R:C  0434A       6692=         USING CP83,R12                                           00055001
00434A 4540 5CE8             00D30 6693=CP83     BAL   R4,DECOMP               DECOMPOSE OPERAND          00056001
00434E 4840 DA4E             00A4E 6694=         LH    R4,OPDLN                GET ADDR OF LAT ENTRY      00057001
004352 58F0 D61C             0061C 6695=         L     R15,LATAB                                          00058001
004356 5064 F000             00000 6696=         ST    R6,0(R4,R15)            STORE PRPOINT IN LAT       00059001
00435A D207 C03A 8001 04384 00001  6697=         MVC   KOC15,1(R8)             PROCEDURE NAME TO GENER CODE 00060001
004360 48F0 DA5C             00A5C 6698=         LH    R15,SPBNST              GET CURRENT PBN            00061001
004364 89F0 0003             00003 6699=         SLL   R15,3                   DISP IN PBTAB TO GENER CODE 00062001
004368 40F0 C042             0438C 6700=         STH   R15,KOC16                                          00063001
00436C 4120 C036             04380 6701=         LA    R2,KOC14                                           00064001
004370 45E0 5588             005D0 6702=         BAL   R14,GENTXTS                                        00065001
004374 000E                        6703=         DC    H'14'                   GENERATE 14 BYTES          00066001
                                   6704=*                                                                 00067001
004376 9601 DA40       00A40       6705=         OI    IOTAB+16,X'01'          ALL DATASETS MAY BE NEEDED 00068001
00437A 4180 8008             00008 6706=KOG1     LA    R8,8(,R8)               INCREASE SOURCE BY 8       00069001
00437E 07F5                        6707=         BR    R5                      RETURN TO SUBSTART         00070001
                                   6708=*                                                                 00071001
004380 458D 00FC             000FC 6709=KOC14    BAL   ADR,LOADPP(FSA)         *** GENERATED CODE ***     00072001
004384 4040404040404040            6710=KOC15    DC    CL8' '                  *** GENERATED CODE ***     00073001
00438C 0000                        6711=KOC16    DC    H'0'                    *** GENERATED CODE ***     00074001
                                   6712=*                                                                 00075001
                                   6713=********************************************************************** 00076001
                                   6714=*                                                                 00077001
                                   6715=*        COMPILER PROGRAM - CP18                                  00078001
                                   6716=*                                                                 00079001
                                   6717=********************************************************************** 00080001
                                   6718=*                                                                 00081001
                                   6719=*        END OF CONDITIONAL STATEMENT                             00082001
                                   6720=*        CONTEXT             PROGRAM                              00083001
                                   6721=*        SOURCE OPERATOR     SEMICOLON,EPSILON, ETA, END          00084001
                                   6722=*        STACK  OPERATOR     ELSES                                00085001
                                   6723=*        OPERANDS            CASE I)   LABEL NUMBER               00086001
                                   6724=*                            CASE II)  PROCEDURE IDENTIFIER       00087001
                                   6725=*                                      LABEL NUMBER               00088001
                  R:C  0438E       6726=         USING CP18,R12                                           00089001
00438E 9101 D080       00080       6727=CP18     TM    COMPFLGS,OPERAND        OPERAND ON ?               00090001
004392 4780 C014             043A2 6728=         BZ    BEB2                    NO, BRANCH                 00091001
004396 4540 5D54             00D9C 6729=         BAL   R4,PLPRST               BRANCH TO PLPRST HANDLE    00092001
00439A 4190 9005             00005 6730=         LA    R9,5(,R9)               CLOPD                      00093001
00439E 94FE D080       00080       6731=         NI    COMPFLGS,255-OPERAND    RESET OPERAND              00094001
0043A2 9180 D080       00080       6732=BEB2     TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?        00095001
0043A6 4710 C02E             043BC 6733=         BO    BEE2                    YES, BRANCH                00096001
0043AA D201 D5F8 9003 005F8 00003  6734=         MVC   WORKPL(2),3(R9)         LOAD LABEL NUMBER          00097001
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  Active USINGs: IEX50000+X'438E',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

0043B0 4820 D5F8              005F8  6735=          LH    R2,WORKPL                                           00098001
0043B4 5810 D61C              0061C  6736=          L     R1,LATAB              LOAD ADDR OF LATAB            00099001
0043B8 5061 2000              00000  6737=          ST    R6,0(R1,R2)           STORE PRPOINTER IN TO LAT     00100001
0043BC 4190 9005              00005  6738=BEE2      LA    R9,5(,R9)             CLOPD                         00101001
0043C0 92FF DA61        00A61        6739=          MVI   GPBN+1,X'FF'          DESTROY GLOBAL DSA            00102001
0043C4 46A0 5060              000A8  6740=          BCT   R10,COMP              CLOPT AND COMPARE             00103001
                                     6741=*                                                                   00104001
                                     6742=********************************************************************** 00105001
                                     6743=*                                                                   00106001
                                     6744=*         COMPILER PROGRAM - CP26                                   00107001
                                     6745=*                                                                   00108001
                                     6746=********************************************************************** 00109001
                                     6747=*                                                                   00110001
                                     6748=*         ERRONEOUS CASE                                            00111001
                                     6749=*         CONTEXT             PROGRAM                               00112001
                                     6750=*         SOURCE OPERATOR     ARRAY, SWITCH, PHI, PI                00113001
                                     6751=*         STACK OPERATOR      .=, SEMICOLON,THENS, ELSES            00114001
                                     6752=*         OPERANDS                                                  00115001
                                     6753=*                                                                   00116001
                          R:C  043C8 6754=          USING CP26,R12                                            00117001
0043C8 4540 5F24              00F6C  6755=CP26      BAL   R4,ERR166             OPDT AND ERR 166/7            00118001
0043CC 06A0                          6756=BUE2      BCTR  R10,0                 RELEASE ONE OPERATOR          00119001
0043CE 951C A001        00001        6757=          CLI   1(R10),X'1C'          'DO' ?                        00120001
0043D2 4780 C01A              043E2  6758=          BE    BUE3                  YES, BRANCH                   00121001
0043D6 4740 C038              04400  6759=          BL    BUG3                  BRANCH IF '= OR '             00122001
0043DA 4190 9005              00005  6760=BUC3      LA    R9,5(,R9)             RELEASE ONE OPERAND           00123001
0043DE 47F0 5060              000A8  6761=BUG4      B     COMP                  BRANCH TO COMPARE             00124001
                                     6762=*                                                                   00125001
0043E2 1B00                          6763=BUE3      SR    R0,R0                 CLEAR 4 OPERANDS +            00126001
0043E4 9102 9006        00006        6764=          TM    6(R9),X'02'                                         00127001
0043E8 4190 9014              00014  6765=          LA    R9,20(,R9)                                          00128001
0043EC 4780 5060              000A8  6766=          BZ    COMP                                                00129001
0043F0 D201 D5F8 9003 005F8 00003    6767=          MVC   WORKPL(2),3(R9)                                     00130001
0043F6 4800 D5F8              005F8  6768=          LH    R0,WORKPL                                           00131001
0043FA 1A90                          6769=          AR    R9,R0                                               00132001
0043FC 47F0 5060              000A8  6770=          B     COMP                                                00133001
                                     6771=*                                                                   00134001
004400 950B A001        00001        6772=BUG3      CLI   1(R10),XFSCOLON       SEMICOLON ?                   00135001
004404 4780 5060              000A8  6773=          BE    COMP                  YES, BRANCH                   00136001
004408 47F0 C012              043DA  6774=          B     BUC3                  ASSIGMENT, BRANCH             00137001
                                     6775=*                                                                   00138001
                                     6776=********************************************************************** 00139001
                                     6777=*                                                                   00140001
                                     6778=*         COMPILER PROGRAM - CP27                                   00141001
                                     6779=*                                                                   00142001
                                     6780=********************************************************************** 00143001
                                     6781=*                                                                   00144001
                                     6782=*         ERRONEOUS CASE                                            00145001
                                     6783=*         CONTEXT             PROGRAM, STATEMENT                    00146001
                                     6784=*         SOURCE OPERATOR     SEE MATRICES                          00147001
                                     6785=*         STACK OPERATOR      SEE MATRICES                          00148001
                                     6786=*         OPERANDS            VARIABLE NUMBER OF OPERANDS ACCORDING TO 00149001
                                     6787=*                             THE OPERATOR                          00150001
                                     6788=*                                                                   00151001
                          R:C  0440C 6789=          USING CP27,R12                                            00152001
00440C 9101 D080        00080        6790=CP27      TM    COMPFLGS,OPERAND      OPERAND ON ?                  00153001
004410 4780 C16A              04576  6791=          BZ    BWB2                  NO, BRANCH                    00154001
004414 4540 5318              00360  6792=          BAL   R4,SERR3                                            00155001
004418 00C3                          6793=          DC    H'195'                ERROR 195                     00156001
                                     6794=*                                                                   00157001
00441A 4190 9005              00005  6795=          LA    R9,5(,R9)             RELEASE ONE OPERAND           00158001
00441E 94FE D080        00080        6796=          NI    COMPFLGS,255-OPERAND  RESET OPERAND                 00159001
004422 06A0                          6797=BNE2      BCTR  R10,0                 RELEASE ONE OPERATOR          00160001
004424 1B11                          6798=          SR    R1,R1                                               00161001
004426 4310 A001              00001  6799=          IC    R1,1(,R10)            LOAD OPERATOR IN R1           00162001
00442A 8910 0002              00002  6800=          SLL   R1,2                  MULTIPLY BY FOUR              00163001
00442E 47F1 C00E              0441A  6801=          B     LISTE-24(R1)                                        00164001
004432 47F0 5060              000A8  6802=LISTE     B     COMP                  LEFT BRACKET                  00165001
004436 47F0 C154              04560  6803=          B     BWF4C                 COLON                         00166001
00443A 47F0 C0EE              044FA  6804=          B     BWH3                  BRACKET                       00167001
00443E 47F0 C15C              04568  6805=          B     BWJ3                  ARRAY                         00168001
004442 47F0 C174              04580  6806=          B     BWJ41                 SWITCH                        00169001
004446 47F0 C174              04580  6807=          B     BWJ41                 SEMICOLON                     00170001
00444A 47F0 C174              04580  6808=          B     BWJ41                 BEGIN                         00171001
00444E 47F0 C174              04580  6809=          B     BWJ41                 BETHA                         00172001
004452 47F0 C174              04580  6810=          B     BWJ41                 PHI                           00173001
004456 47F0 C174              04580  6811=          B     BWJ41                                               00174001
00445A 47F0 C174              04580  6812=          B     BWJ41                 EQUAL                         00175001
00445E 47F0 C174              04580  6813=          B     BWJ41                 LESS                          00176001
004462 47F0 C174              04580  6814=          B     BWJ41                 GREATER                       00177001
004466 47F0 C174              04580  6815=          B     BWJ41                 NOTEQUAL                      00178001
00446A 47F0 C174              04580  6816=          B     BWJ41                 NOTGREATER                    00179001
00446E 47F0 C174              04580  6817=          B     BWJ41                 NOLLESS                       00180001
004472 47F0 C0E6              044F2  6818=          B     BWF4                  ASSIGMENT                     00181001
004476 47F0 5060              000A8  6819=          B     COMP                  GOTO                          00182001
00447A 47F0 C0DE              044EA  6820=          B     BWK7                  FOR                           00183001
00447E 47F0 C0CE              044DA  6821=          B     BWK5                  STEP                          00184001
004482 47F0 C0CA              044D6  6822=          B     BWK4                  UNTIL                         00185001
004486 47F0 C0CE              044DA  6823=          B     BWK5                  WHILE                         00186001
00448A 47F0 C174              04580  6824=          B     BWJ41                 DO                            00187001
00448E 47F0 5060              000A8  6825=          B     COMP                  IF                            00188001
004492 47F0 C0E6              044F2  6826=          B     BWF4                  THEN                          00189001
004496 47F0 C174              04580  6827=          B     BWJ41                 ELSE                          00190001
00449A 47F0 C174              04580  6828=          B     BWJ41                 NOT                           00191001
00449E 47F0 C174              04580  6829=          B     BWJ41                 IMPLICATION                   00192001
0044A2 47F0 C174              04580  6830=          B     BWJ41                 OR                            00193001
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  Active USINGs: IEX50000+X'440C',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.13

0044A6 47F0 C174            04580  6831=         B     BWJ41                AND                             00194001
0044AA 47F0 C174            04580  6832=         B     BWJ41                EQUIVALENT                      00195001
0044AE 47F0 C174            04580  6833=         B     BWJ41                ALPHA                           00196001
0044B2 47F0 5060            000A8  6834=         B     COMP                 IFS                             00197001
0044B6 47F0 C174            04580  6835=         B     BWJ41                THENS                           00198001
0044BA 47F0 C174            04580  6836=         B     BWJ41                ELSES                           00199001
0044BE 47F0 C10A            04516  6837=         B     BWG3                 PARENT IN PROCEDURE             00200001
0044C2 47F0 C102            0450E  6838=         B     BWG4                 PARENT IN STANDARD FUNCTION     00201001
0044C6 47F0 C174            04580  6839=         B     BWJ41                MONODIC MINUS                   00202001
0044CA 47F0 C156            04562  6840=         B     BWF4B                BRACKET  RECL                   00203001
0044CE 47F0 C0D0            044DC  6841=         B     BWK6                 FOR.=                           00204001
0044D2 47F0 C146            04552  6842=         B     BWK3                 SWITCH.=                        00205001
                                   6843=*                                                                   00206001
0044D6 4190 9005            00005  6844=BWK4     LA    R9,5(,R9)            CLOPT                           00207001
0044DA 06A0                        6845=BWK5     BCTR  R10,0                CLOPT                           00208001
0044DC 06A0                        6846=BWK6     BCTR  R10,0                CLOPT                           00209001
0044DE 41AA 0001            00001  6847=BWK8     LA    R10,1(R10)           RESERVE ONE PLACE IN STACK      00210001
0044E2 921C A000      00000        6848=         MVI   0(R10),X'1C'         STACK 'DO'                      00211001
0044E6 47F0 5060            000A8  6849=         B     COMP                 BRANCH TO COMPARE               00212001
                                   6850=*                                                                   00213001
0044EA 4540 5D02            00D4A  6851=BWK7     BAL   R4,STACKAPI          STACK API                       00214001
0044EE 47F0 C0D2            044DE  6852=         B     BWK8                                                 00215001
                                   6853=*                                                                   00216001
0044F2 4190 9005            00005  6854=BWF4     LA    R9,5(,R9)            RELEASE ONE OPERAND             00217001
0044F6 47F0 5060            000A8  6855=         B     COMP                 BRANCH TO COMPARE               00218001
                                   6856=*                                                                   00219001
0044FA 4190 900F            0000F  6857=BWH3     LA    R9,15(0,R9)          RELEASE THREE OPERANDS          00220001
0044FE 47F0 C11C            04528  6858=         B     BWG31                BRANCH                          00221001
                                   6859=*                                                                   00222001
004502 950B 8000      00000        6860=BWJ4     CLI   0(R8),XFSCOLON       SEMICOLON IN SOURCE ?           00223001
004506 4780 C174            04580  6861=         BE    BWJ41                                                00224001
00450A 47F0 5060            000A8  6862=         B     COMP                                                 00225001
                                   6863=*                                                                   00226001
00450E 4190 9014            00014  6864=BWG4     LA    R9,20(,R9)           RELEASE FOUR OPERANDS           00227001
004512 47F0 C11C            04528  6865=         B     BWG31                BRANCH                          00228001
                                   6866=*                                                                   00229001
004516 1B00                        6867=BWG3     SR    R0,R0                RELEASE                         00230001
004518 4309 0000            00000  6868=         IC    R0,0(R9)                     N                       00231001
00451C 8900 0008            00008  6869=         SLL   R0,8                           +                     00232001
004520 4309 0001            00001  6870=         IC    R0,1(R9)                         2                   00233001
004524 4190 900A            0000A  6871=         LA    R9,10(R0,R9)                         OPERANDS        00234001
004528 9130 A000      00000        6872=BWG31    TM    0(R10),X'30'         CHECK IF IN STACK CONT OPT      00235001
00452C 47E0 5060            000A8  6873=         BNO   COMP                 NO, BRANCH                      00236001
004530 06A0                        6874=         BCTR  R10,0                RELEASE ONE OPERATOR            00237001
004532 58B0 5194            001DC  6875=         L     R11,DECAADD          LOAD R11 WITH PROG CONT MA      00238001
004536 9530 A001      00001        6876=         CLI   1(R10),X'30'         CHECK IF PROG CONT OPT          00239001
00453A 4780 5060            000A8  6877=         BE    COMP                 BRANCH IF PCO TO COMPARE        00240001
00453E 58B0 519C            001E4  6878=         L     R11,STC              LOAD R11 WITH STAT CONT MA      00241001
004542 9533 A001      00001        6879=         CLI   1(R10),X'33'         CHECK IF STAT CONT OPT          00242001
004546 4780 5060            000A8  6880=         BE    COMP                 BRANCH IF STC TO COMPARE        00243001
00454A 58B0 51A0            001E8  6881=         L     R11,EXC              LOAD R11 WITH EXP CONT MAT      00244001
00454E 47F0 5060            000A8  6882=         B     COMP                 BRANCH TO COMPARE               00245001
                                   6883=*                                                                   00246001
004552 1B11                        6884=BWK3     SR    R1,R1                                                00247001
004554 4319 0001            00001  6885=         IC    R1,1(R9)             NO OF SWITCH ELEMENT OPERANDS   00248001
004558 4199 1014            00014  6886=         LA    R9,20(R9,R1)         CLEAR OPERANDS                  00249001
00455C 47F0 5060            000A8  6887=         B     COMP                 BRANCH TO COMPARE               00250001
                                   6888=*                                                                   00251001
004560 06A0                        6889=BWF4C    BCTR  R10,0                COLON                           00252001
004562 06A0                        6890=BWF4B    BCTR  R10,0                ARRAY BRACKET                   00253001
004564 4199 000F            0000F  6891=         LA    R9,15(R9)            RELEASE 3 OPERANDS              00254001
004568 4A90 5190            001D8  6892=BWJ3     AH    R9,GREGN             CLEAR NUMBER OF ARRAY IDENT     00255001
00456C D201 5190 DA50 001D8 00A50  6893=         MVC   GREGN(2),ZEROHW      CLEAR COUNTER                   00256001
004572 47F0 5060            000A8  6894=         B     COMP                                                 00257001
                                   6895=*                                                                   00258001
004576 4540 5318            00360  6896=BWB2     BAL   R4,SERR3             ERROR PATTERN ENTRY             00259001
00457A 00C2                        6897=         DC    H'194'               ERROR 194                       00260001
                                   6898=*                                                                   00261001
00457C 47F0 C016            04422  6899=         B     BNE2                                                 00262001
                                   6900=*                                                                   00263001
004580 58C0 52F4            0033C  6901=BWJ41    L     R12,SCPTAB+4*84      R12 -> CP84                     00264001
004584 07FC                        6902=         BR    R12                  BRANCH TO CP84                  00265001
                                   6903=*                                                                   00266001
                                   6904=*********************************************************************** 00267001
                                   6905=*                                                                   00268001
                                   6906=*        COMPILER PROGRAM - CP28                                    00269001
                                   6907=*                                                                   00270001
                                   6908=*********************************************************************** 00271001
                                   6909=*                                                                   00272001
                                   6910=*   ERRONEOUS CASE - DECLARATION IN WRONG  POSITION                 00273001
                                   6911=*        CONTEXT             PROGRAM                                00274001
                                   6912=*        SOURCE OPERATOR     S                                      00275001
                                   6913=*        STACK OPERATOR      SEE PROGRAM CONTEXT  MATRIX            00276001
                                   6914=*        OPERANDS            VARIABLE NUMBER OF OPERANDS ACCORDING TO 00277001
                                   6915=*                            THE OPERATOR                           00278001
                                   6916=*                                                                   00279001
                  R:C  04586       6917=         USING CP28,R12                                             00280001
004586 4540 5F24            00F6C  6918=CP28     BAL   R4,ERR166                                            00281001
00458A 4540 590C            00954  6919=         BAL   R4,SCHDL             SEMICOLON HANDLING              00282001
00458E 9507 A000      00000        6920=         CLI   0(R10),XFCOLON       STACK OPERATOR COLON ?          00283001
004592 4780 C022            045A8  6921=         BE    BYF1                 YES                             00284001
004596 952C A000      00000        6922=         CLI   0(R10),X'2C'         ARRAY BRACKET IN STACK          00285001
00459A 4780 C024            045AA  6923=         BE    BYF1+2               YES                             00286001
00459E 950A A000      00000        6924=         CLI   0(R10),X'0A'         SWITCH  IN STACK                00287001
0045A2 4780 C038            045BE  6925=         BE    BYF2                 YES                             00288001
0045A6 07F5                        6926=         BR    R5                   RETURN TO SUBSTART              00289001
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  Active USINGs: IEX50000+X'4586',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   6927=*                                                                      00290001
0045A8 06A0                        6928=BYF1      BCTR  R10,0                   RELEASE COLON                  00291001
0045AA 4BA0 516C            001B4  6929=          SH    R10,KH2                 RELEASE BRACKET AND ARRAY      00292001
0045AE 4199 000F            0000F  6930=          LA    R9,15(R9)               RELEASE 3 OPERANDS             00293001
0045B2 4A90 5190            001D8  6931=          AH    R9,GREGN                CLEAR NUMBER OF ARRAY IDENT    00294001
0045B6 D201 5190 DA50 001D8 00A50  6932=          MVC   GREGN(2),ZEROHW         CLEAR COUNTER                  00295001
0045BC 07F5                        6933=          BR    R5                      RETURN TO SUBSTART             00296001
                                   6934=*                                                                      00297001
0045BE 4199 000A            0000A  6935=BYF2      LA    R9,10(R9)               CLEAR TWO OPERANDS             00298001
0045C2 06A5                        6936=          BCTR  R10,R5                  CLEAR SWITCH, SUBSTART         00299001
                                   6937=*                                                                      00300001
                                   6938=********************************************************************** 00301001
                                   6939=*                                                                      00302001
                                   6940=*         COMPILER PROGRAM - CP29                                      00303001
                                   6941=*                                                                      00304001
                                   6942=********************************************************************** 00305001
                                   6943=*                                                                      00306001
                                   6944=*         ERRONEOUS CASE  - BEGIN OF DECLARATION                       00307001
                                   6945=*         CONTEXT              PROGRAM                                 00308001
                                   6946=*         SOURCE OPERATOR      ARRAY,SWITCH,PI,PHI                     00309001
                                   6947=*         STACK OPERATOR       BEGIN, DO                               00310001
                                   6948=*         OPERANDS             NONE OR ONE                             00311001
                                   6949=*                                                                      00312001
                 R:C  045C4        6950=          USING CP29,R12                                               00313001
0045C4 4540 5F24            00F6C  6951=CP29      BAL   R4,ERR166                                              00314001
0045C8 58C0 51B4            001FC  6952=CAF1      L     R12,SCPTAB+4*4          R12 -> CP4                     00315001
0045CC 07FC                        6953=          BR    R12                     BRANCH TO CP4                  00316001
                                   6954=*                                                                      00317001
                                   6955=********************************************************************** 00318001
                                   6956=*                                                                      00319001
                                   6957=*         COMPILER PROGRAM - CP30                                      00320001
                                   6958=*                                                                      00321001
                                   6959=********************************************************************** 00322001
                                   6960=*                                                                      00323001
                                   6961=*         ERRONEOUS CASE  - LABEL IN INCORRECT POSITION                00324001
                                   6962=*         CONTEXT              PROGRAM                                 00325001
                                   6963=*         SOURCE OPERATOR      LABEL OPERATOR                          00326001
                                   6964=*         STACK OPERATOR       SEE PROGRAM CONTEXT MATRIX              00327001
                                   6965=*         OPERANDS             LABEL IDENTIFIER                        00328001
                                   6966=*                                                                      00329001
                 R:C  045CE        6967=          USING CP30,R12                                               00330001
0045CE 9101 D080      00080        6968=CP30      TM    COMPFLGS,OPERAND        OPERAND ON ?                   00331001
0045D2 4780 C014            045E2  6969=          BZ    BKQB1                   NO, BRANCH                     00332001
0045D6 4540 5310            00358  6970=          BAL   R4,SERR2                                               00333001
0045DA 00A9                        6971=          DC    H'169'                  ERRO 169                       00334001
                                   6972=*                                                                      00335001
0045DC 4190 9005            00005  6973=          LA    R9,5(,R9)               RELEASE ONE OPERAND            00336001
0045E0 07F5                        6974=          BR    R5                      BRANCH TO SUBSTART             00337001
                                   6975=*                                                                      00338001
0045E2 58C0 52F4            0033C  6976=BKQB1     L     R12,SCPTAB+4*84         R12 -> CP84                    00339001
0045E6 07FC                        6977=          BR    R12                     BRANCH TO CP84                 00340001
                                   6978=*                                                                      00341001
                                   6979=********************************************************************** 00342001
                                   6980=*                                                                      00343001
                                   6981=*         COMPILER PROGRAM - CP31                                      00344001
                                   6982=*                                                                      00345001
                                   6983=********************************************************************** 00346001
                                   6984=*                                                                      00347001
                                   6985=*         ERRONEOUS CASE  - INCORRECT CONBINATION OF OPERATORS IN      00348001
                                   6986=*                           PROGRAM CONTEXT                            00349001
                                   6987=*         SOURCE OPERATOR      SEE PROGRAM CONTEXT MATRIX              00350001
                                   6988=*         STACK  OPERATOR      SEE PROGRAM CONTEXT MATRIX              00351001
                                   6989=*         OPERANDS             NONE OR ONE                             00352001
                                   6990=*                                                                      00353001
                 R:C  045E8        6991=          USING CP31,R12                                               00354001
0045E8 41B0 B266            00266  6992=CP31      LA    R11,614(,R11)           SWITCH TO EXPRESSION CONTEXT   00355001
0045EC 9101 D080      00080        6993=          TM    COMPFLGS,OPERAND        OPERAND ON ?                   00356001
0045F0 4780 C016            045FE  6994=          BZ    CEB2                    NO, BRANCH                     00357001
0045F4 4540 5304            0034C  6995=          BAL   R4,SERR4                                               00358001
0045F8 00A1                        6996=          DC    H'161'                  ERROR 161                      00359001
                                   6997=*                                                                      00360001
0045FA 47F0 5060            000A8  6998=          B     COMP                    BRANCH TO COMPARE              00361001
                                   6999=*                                                                      00362001
0045FE 4540 5304            0034C  7000=CEB2      BAL   R4,SERR4                                               00363001
004602 00A0                        7001=          DC    H'160'                  ERROR 160                      00364001
                                   7002=*                                                                      00365001
004604 47F0 5060            000A8  7003=          B     COMP                    BRANCH TO COMPARE              00366001
                                   7004=*                                                                      00367001
                                   7005=********************************************************************** 00368001
                                   7006=*                                                                      00369001
                                   7007=*         COMPILER PROGRAM - CP63                                      00370001
                                   7008=*                                                                      00371001
                                   7009=********************************************************************** 00372001
                                   7010=*                                                                      00373001
                                   7011=*         MONADIC MINUS SIGN                                           00374001
                                   7012=*         CONTEXT              EXPRESSION                              00375001
                                   7013=*         SOURCE OPERATOR      ALL EXCEPT 'NOT',C,1),'IF','POWER'      00376001
                                   7014=*         STACK OPERATOR       MONADIC MINUS                           00377001
                                   7015=*         OPERANDS             ARITHMETIC OPERAND                      00378001
                                   7016=*                                                                      00379001
                 R:C  04608        7017=          USING CP63,R12                                               00380001
004608 4140 C01C            04624  7018=CP63      LA    R4,GBD4                 LOAD RETURN ADD FOR ERROR      00381001
00460C 4530 5F08            00F50  7019=          BAL   R3,OPDTEST              OPDT AND ERROR NUMBER 162      00382001
004610 4540 5E9A            00EE2  7020=          BAL   R4,ARRTEST1             ARRAY AND PROC TEST            00383001
004614 9103 9001      00001        7021=          TM    1(R9),X'03'             OPERAND ARITHMETIC ?           00384001
004618 4740 C020            04628  7022=          BM    GAD1                    YES, BRANCH                    00385001
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  Active USINGs: IEX50000+X'4608',R12  IEX50000+X'48',R5  WORKAREA,R13

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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                           X390 3.1.04  2012/08/17 13.13

00461C 9110 9000        00000        7023=        TM    0(R9),APIMASK          OPERAND API ?                    00386001
004620 4780 C100              04708  7024=        BZ    GAC2                   NO, BRANCH                       00387001
004624 46A0 5060              000A8  7025=GBD4    BCT   R10,COMP               RELEASE 1 OPT AND COMPARE        00388001
004628 91C0 D080        00080        7026=GAD1    TM    COMPFLGS,COMPMODE+SUBSCOPT  SYNTAX OR SUBSC OPTIMIZED ?  00389001
00462C 4770 C01C              04624  7027=        BNZ   GBD4                   NO, BRANCH                       00390001
004630 4540 578A              007D2  7028=        BAL   R4,OPDREC              OPERAND RECOGNIZER               00391001
004634 9102 9001        00001        7029=        TM    1(R9),X'02'            OPERAND REAL ?                   00392001
004638 4780 C09C              046A4  7030=        BZ    GBE1                   NO, INTEGER, BRANCH              00393001
00463C 9120 9000        00000        7031=        TM    0(R9),X'20'            OPERAND A VALUE ?                00394001
004640 4710 C074              0467C  7032=        BO    GAH3                   AN ADDR, BRANCH                  00395001
004644 9140 9000        00000        7033=        TM    0(R9),X'40'            OPERAND IN A REGISTER ?          00396001
004648 4710 C068              04670  7034=        BO    GAH2                   NO, IN STORAGE, BRANCH           00397001
00464C 43E9 0003              00003  7035=        IC    R14,3(R9)              INSERT                           00398001
004650 42E0 C05F              04667  7036=GBC5    STC   R14,GAJ1+1             REGISTER                         00399001
004654 88E0 0004              00004  7037=        SRL   R14,4                  INTO                             00400001
004658 42E0 D5F8              005F8  7038=        STC   R14,WORKPL             GENERATED                        00401001
00465C D100 C05F D5F8 04667 005F8  7039=        MVN   GAJ1+1(1),WORKPL                                        00402001
004662 4520 5598              005E0  7040=        BAL   R2,GENTXTP2            GENERATE 2 BYTES                 00403001
004666 2300                          7041=GAJ1    LCDR  0,0                    *** GENERATED CODE ***           00404001
004668 9608 9000        00000        7042=GAJ11   OI    0(R9),X'08'            INSERT NO ASSIGMENT BIT          00405001
00466C 46A0 5060              000A8  7043=        BCT   R10,COMP               DELEASE OPERATOR AND COMP        00406001
004670 9180 9000        00000        7044=GAH2    TM    0(R9),X'80'            LO IN A REG BEFORE ?             00407001
004674 4710 C074              0467C  7045=        BO    GAH3                   NO, BRANCH                       00408001
004678 4B70 DA56              00A56  7046=        SH    R7,ONEENTRY            RELEASE 1 OBJ STACK ENTRY        00409001
00467C 4540 5BBE              00C06  7047=GAH3    BAL   R4,ROUTIN11            RESERVE A FLOATING POINT REG     00410001
004680 4B90 5170              001B8  7048=        SH    R9,KH5                 INCREASE OPERAND STACK           00411001
004684 9120 9005        00005        7049=        TM    5(R9),X'20'            LO A VALUE ?                     00412001
004688 4780 C094              0469C  7050=        BZ    GBC2                   YES, BRANCH                      00413001
00468C 4540 5996              009DE  7051=        BAL   R4,ROUTINE2            CALL ROUTINE NUMBER 2            00414001
004690 4190 9005              00005  7052=GBC4    LA    R9,5(,R9)              DECREASE OPERAND STACK           00415001
004694 89E0 0004              00004  7053=        SLL   R14,4                                                   00416001
004698 47F0 C048              04650  7054=        B     GBC5                   BRANCH                           00417001
                                     7055=*                                                                   00418001
00469C 4540 5A50              00A98  7056=GBC2    BAL   R4,ROUTINE4            GENERATE LOADING INTO FPR        00419001
0046A0 47F0 C088              04690  7057=        B     GBC4                   BRANCH                           00420001
                                     7058=*                                                                   00421001
0046A4 9120 9000        00000        7059=GBE1    TM    0(R9),X'20'            OPERAND A VALUE ?                00422001
0046A8 4710 C0D8              046E0  7060=        BO    GBF3                   ADDR, BRANCH                     00423001
0046AC 9140 9000        00000        7061=        TM    0(R9),X'40'            OPERAND IN A REGISTER ?          00424001
0046B0 4710 C0CC              046D4  7062=        BO    GBF2                   IN STORAGE, BRANCH               00425001
0046B4 43E9 0003              00003  7063=        IC    R14,3(R9)              INSERT                           00426001
0046B8 42E0 C0C7              046CF  7064=GBG11   STC   R14,GBG1+1             REGISTER                         00427001
0046BC 88E0 0004              00004  7065=        SRL   R14,4                  INTO                             00428001
0046C0 42E0 D5F8              005F8  7066=        STC   R14,WORKPL             GENERATED                        00429001
0046C4 D100 C0C7 D5F8 046CF 005F8  7067=        MVN   GBG1+1(1),WORKPL       CODE                             00430001
0046CA 4520 559E              005E6  7068=        BAL   R2,GENTXT2             GENERATE 2 BYTES                 00431001
0046CE 1300                          7069=GBG1    LCR   0,0                    *** GENERATED CODE ***           00432001
0046D0 47F0 C060              04668  7070=        B     GAJ11                                                   00433001
                                     7071=*                                                                   00434001
0046D4 9180 9000        00000        7072=GBF2    TM    0(R9),X'80'            LO IN A REG BEFORE ?             00435001
0046D8 4710 C0D8              046E0  7073=        BO    GBF3                   DECREASE                         00436001
0046DC 4B70 DA56              00A56  7074=        SH    R7,ONEENTRY            RELEASE 1 OBJ STACK ENTRY        00437001
0046E0 4540 5AB0              00AF8  7075=GBF3    BAL   R4,ROUTINE7            RESERVE GENERAL PURPOSE REG      00438001
0046E4 4B90 5170              001B8  7076=        SH    R9,KH5                 INCREASE OPERAND STACK           00439001
0046E8 9120 9005        00005        7077=        TM    5(R9),X'20'            LO A VALUE ?                     00440001
0046EC 4710 C0F8              04700  7078=        BO    GBH5                   AN ADDR, BRANCH                  00441001
0046F0 4540 5A64              00AAC  7079=        BAL   R4,ROUTINE5            GENERATE LOADING INTO GPR        00442001
0046F4 4190 9005              00005  7080=GBK4    LA    R9,5(,R9)              DECREASE OPERAND STACK           00443001
0046F8 89E0 0004              00004  7081=        SLL   R14,4                  SHIFT REGISTER NUMBER            00444001
0046FC 47F0 C0B0              046B8  7082=        B     GBG11                  BRANCH                           00445001
                                     7083=*                                                                   00446001
004700 4540 5AA0              00AE8  7084=GBH5    BAL   R4,ROUTINE6            GENERATE LOADING INTO GPR        00447001
004704 47F0 C0EC              046F4  7085=        B     GBK4                   BRANCH                           00448001
                                     7086=*                                                                   00449001
004708 4540 5310              00358  7087=GAC2    BAL   R4,SERR2                                                00450001
00470C 00A3                          7088=        DC    H'163'                 ERROR 163                        00451001
                                     7089=*                                                                   00452001
00470E D204 9000 5182 00000 001CA  7090=GAC4    MVC   0(5,R9),API            MOVE API                         00453001
004714 46A0 5060              000A8  7091=        BCT   R10,COMP               RELEASE OPERATOR AND COMP        00454001
                                     7092=*                                                                   00455001
                                     7093=*********************************************************************** 00456001
                                     7094=*                                                                   00457001
                                     7095=*       COMPILER PROGRAM - CP65                                     00458001
                                     7096=*                                                                   00459001
                                     7097=*********************************************************************** 00460001
                                     7098=*                                                                   00461001
                                     7099=*       HANDLING OF 'NOT' AND 'IF'                                  00462001
                                     7100=*       CONTEXT             EXPRESSION                              00463001
                                     7101=*       SOURCE OPERATOR     CASE I 'NOT'                            00464001
                                     7102=*                           CASE II 'IF'                            00465001
                                     7103=*                                                                   00466001
                                     7104=*       STACK OPERATOR      CASE I  ALL EXCEPT  'NOT',ARITHMETICAL  00467001
                                     7105=*                                   OPERATORS,RELATIONAL OPERATORS  00468001
                                     7106=*       CASE II 'IF','IFS'                                          00469001
                                     7107=*                                                                   00470001
                                     7108=*       OPERANDS            NONE                                    00471001
                                     7109=*                                                                   00472001
                  R:C  04718         7110=        USING CP65,R12                                              00473001
004718 9101 D080        00080        7111=CP65    TM    COMPFLGS,OPERAND       OPERAND ON ?                     00474001
00471C 4780 C012              0472A  7112=        BZ    GFC2                   NO, BRANCH                       00475001
004720 4540 5304              0034C  7113=        BAL   R4,SERR4                                                00476001
004724 00A4                          7114=        DC    H'164'                 ERROR 164                        00477001
                                     7115=*                                                                   00478001
004726 4190 9005              00005  7116=        LA    R9,5(,R9)              RELEASE ONE OPERAND              00479001
00472A 4540 5E30              00E78  7117=GFC2    BAL   R4,MOVEOPTK            INCREASE OPT STACK POINTER       00480001
00472E D200 A000 8000 00000 00000  7118=        MVC   0(1,R10),0(R8)         INSERT SOURCE INTO STACK         00481001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

004734 07F5                        7119=         BR    R5                    RETURN TO SUBSTART                00482001
                                   7120=*                                                                      00483001
                                   7121=********************************************************************** 00484001
                                   7122=*                                                                      00485001
                                   7123=*        COMPILER PROGRAM - CP66                                       00486001
                                   7124=*                                                                      00487001
                                   7125=********************************************************************** 00488001
                                   7126=*                                                                      00489001
                                   7127=*        HANDLING OF PLUS AND MINUS                                    00490001
                                   7128=*        CONTEXT              EXPRESSION                               00491001
                                   7129=*        SOURCE OPERATOR      +,-                                      00492001
                                   7130=*        STACK  OPERATOR      ALL EXCEPT ARITHMETIC  OPERATORS         00493001
                                   7131=*        OPERANDS             NONE OR ONE ARITHMETIC OPERAND.          00494001
                                   7132=*                                                                      00495001
                 R:C  04736        7133=         USING CP66,R12                                                00496001
004736 4540 5E30            00E78  7134=CP66     BAL   R4,MOVEOPTK             INCREASE OPT STACK POINTER 00497001
00473A 9101 D080      00080        7135=         TM    COMPFLGS,OPERAND        OPDT                       00498001
00473E 4780 C014            0474A  7136=         BZ    GHC2                    BRANCH IF FALSE            00499001
004742 D200 A000 8000 00000 00000  7137=         MVC   0(1,R10),0(R8)          INSERT SOURCE INTO STACK   00500001
004748 07F5                        7138=         BR    R5                      BRANCH TO SNOT             00501001
00474A 9501 8000      00000        7139=GHC2     CLI   0(R8),XFMINUS           MINUS IN SOURCE ?          00502001
00474E 4770 C022            04758  7140=         BNE   GHC3                    NO, BRANCH                 00503001
004752 922B A000      00000        7141=         MVI   0(R10),X'2B'            STACK MONADIC MINUS        00504001
004756 07F5                        7142=         BR    R5                      BRANCH TO SUBSTART         00505001
                                   7143=*                                                                      00506001
004758 92FF 518C      001D4        7144=GHC3     MVI   SWVAL,X'FF'             SET SWITCH TO ONE          00507001
00475C 06A0                        7145=         BCTR  R10,0                   DECREASE OPT STACK POINTER 00508001
00475E 952F 8001      00001        7146=GHC4     CLI   1(R8),XFZETA            END OF SOURCE BUFFER ?     00509001
004762 4740 C03A            04770  7147=         BL    GHC5                    BRANCH IF OPERATOR         00510001
004766 0725                        7148=         BHR   R5                      OPERAND, BR TO SUBSTART    00511001
004768 4540 5084            000CC  7149=         BAL   R4,JBUFFER                                         00512001
00476C 47F0 C028            0475E  7150=         B     GHC4                                               00513001
                                   7151=*                                                                      00514001
004770 9506 8001      00001        7152=GHC5     CLI   1(R8),XFLBRAC           LEFT BRACKET IN SOURCE ?   00515001
004774 0785                        7153=         BER   R5                      YES, BRANCH TO SUBSTART    00516001
004776 4540 5304            0034C  7154=         BAL   R4,SERR4                ERROR PATTERN ENTRY        00517001
00477A 00A0                        7155=         DC    H'160'                  ERROR 160                  00518001
                                   7156=*                                                                      00519001
00477C 07F5                        7157=         BR    R5                      BRANCH TO SUBSTART         00520001
                                   7158=*                                                                      00521001
                                   7159=********************************************************************** 00522001
                                   7160=*                                                                      00523001
                                   7161=*        COMPILER PROGRAM - CP67                                       00524001
                                   7162=*                                                                      00525001
                                   7163=********************************************************************** 00526001
                                   7164=*                                                                      00527001
                                   7165=*        STACKING OF ARITHMETIC, RELATIONAL OR BOOLEAN OPERATORS       00528001
                                   7166=*        CONTEXT              EXPRESSION                               00529001
                                   7167=*        SOURCE OPERATOR      SEE EXPRESSION CONTEXT  MATRIX           00530001
                                   7168=*        STACK  OPERATOR      SEE EXPRESSION CONTEXT  MATRIX           00531001
                                   7169=*        OPERANDS             ONE OPERAND                              00532001
                                   7170=*                                                                      00533001
                 R:C  0477E        7171=         USING CP67,R12                                                00534001
00477E 9101 D080      00080        7172=CP67     TM    COMPFLGS,OPERAND      OPERAND ON ?                 00535001
004782 4780 C01E            0479C  7173=         BZ    GJC2                  NO, BRANCH                   00536001
004786 4540 5E30            00E78  7174=         BAL   R4,MOVEOPTK           INCREASE OPT STACK POINTER   00537001
00478A D200 A000 8000 00000 00000  7175=         MVC   0(1,R10),0(R8)        INSERT SOURCE INTO STACK     00538001
004790 9505 A000      00000        7176=         CLI   0(R10),XFPOWER        OPT POWER ?                  00539001
004794 0775                        7177=         BNER  R5                    NO, RETURN TO SUBSTART       00540001
004796 9200 518C      001D4        7178=         MVI   SWVAL,0               SET SWITCH TO ZERO           00541001
00479A 07F5                        7179=         BR    R5                    RETURN TO SUBSTART           00542001
                                   7180=*                                                                      00543001
00479C 4540 5304            0034C  7181=GJC2     BAL   R4,SERR4              ERROR PATTERN ENTRY          00544001
0047A0 00A2                        7182=         DC    H'162'                ERROR 162                    00545001
                                   7183=*                                                                      00546001
0047A2 07F5                        7184=         BR    R5                    RETURN TO SUBSTART           00547001
                                   7185=*                                                                      00548001
                                   7186=********************************************************************** 00549001
                                   7187=*                                                                      00550001
                                   7188=*        COMPILER PROGRAM - CP68                                       00551001
                                   7189=*                                                                      00552001
                                   7190=********************************************************************** 00553001
                                   7191=*                                                                      00554001
                                   7192=*        OPENING AND CLOSING PARENTHESIS                               00555001
                                   7193=*        CONTEXT              EXPRESSION                               00556001
                                   7194=*        SOURCE OPERATOR      )                                        00557001
                                   7195=*        STACK OPERATOR       (                                        00558001
                                   7196=*        OPERANDS             ONE                                      00559001
                                   7197=*                                                                      00560001
                 R:C  047A4        7198=         USING CP68,R12                                                00561001
0047A4 4140 C008            047AC  7199=CP68     LA    R4,GLF2               LOAD RETURN ADDR             00562001
0047A8 4530 5F08            00F50  7200=         BAL   R3,OPDTEST            OPDT AND ERROR 162           00563001
0047AC 46A0 503C            00084  7201=GLF2     BCT   R10,SPECTEST          RELEASE OPT AND SPECIAL TEST 00564001
                                   7202=*                                                                      00565001
                                   7203=********************************************************************** 00566001
                                   7204=*                                                                      00567001
                                   7205=*        COMPILER PROGRAM - CP70                                       00568001
                                   7206=*                                                                      00569001
                                   7207=********************************************************************** 00570001
                                   7208=*                                                                      00571001
                                   7209=*        CONTEXT SWITCH,EXPRESSION CONTEXT                             00572001
                                   7210=*        CONTEXT              EXPRESSION                               00573001
                                   7211=*        SOURCE OPERATOR      ),'ELSE' ALL OPERATORS NOT SPECIFIED IN  00574001
                                   7212=*                             EXPRESSION CONTEXT                       00575001
                                   7213=*        STACK OPERATOR       ALL OPERATORS NOT SPECIFIED IN           00576001
                                   7214=*                             EXPRESSION CONTEXT                       00577001
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  Active USINGs: IEX50000+X'47A4',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   7215=*       OPERANDS            NOT TREATED                                  00578001
                                   7216=*                                                                        00579001
                R:C  047B0         7217=        USING CP70,R12                                                   00580001
0047B0 4BB0 517E            001C6  7218=CP70    SH     R11,KH324                 SWITCH TO STMT  CONTEXT         00581001
0047B4 47F0 5060            000A8  7219=        B      COMP                      BRANCH TO COMPARE               00582001
                                   7220=*                                                                        00583001
                                   7221=*********************************************************************** 00584001
                                   7222=*                                                                        00585001
                                   7223=*       COMPILER PROGRAM - CP72                                          00586001
                                   7224=*                                                                        00587001
                                   7225=*********************************************************************** 00588001
                                   7226=*                                                                        00589001
                                   7227=*       NESTED CONDITIONAL EXPRESSIONS                                   00590001
                                   7228=*       CONTEXT             EXPRESSION                                   00591001
                                   7229=*       SOURCE OPERATOR     'ELSE'                                       00592001
                                   7230=*       STACK OPERATOR      'ELSE'                                       00593001
                                   7231=*       OPERANDS            NOT TR                                       00594001
                                   7232=*                                                                        00595001
                R:C  047B8         7233=        USING CP72,R12                                                   00596001
0047B8 06A0                        7234=CP72    BCTR  R10,0                      DECREASE OPT STACK POINTER      00597001
0047BA 9516 A000      00000        7235=        CLI   0(R10),XFASSIGN            OPT ASSIGMENT ?                 00598001
0047BE 4780 C00E            047C6  7236=        BE    JAF2                       YES, BRANCH                     00599001
0047C2 9517 A000      00000        7237=        CLI   0(R10),XFGOTO              OPT GOTO ?                      00600001
0047C6 41A0 A001            00001  7238=JAF2    LA    R10,1(,R10)                INCR OPT STACK POINTER          00601001
0047CA 58C0 52D0            00318  7239=        L     R12,SCPTAB+4*75            R12 -> CP75                     00602001
0047CE 477C 0000            00000  7240=        BNE   0(R12)                     NOT ASSIGMENT, BRANCH           00603001
0047D2 58C0 52E0            00328  7241=        L     R12,SCPTAB+4*79            R12 -> CP79                     00604001
0047D6 07FC                        7242=        BR    R12                        BRANCH TO CP79                  00605001
                                   7243=*                                                                        00606001
                                   7244=*********************************************************************** 00607001
                                   7245=*                                                                        00608001
                                   7246=*       COMPILER PROGRAM - CP73                                          00609001
                                   7247=*                                                                        00610001
                                   7248=*********************************************************************** 00611001
                                   7249=*                                                                        00612001
                                   7250=*       ERRONEOUS CASE - THE OPENING PARENTHESIS IS MISSING IN           00613001
                                   7251=*                        A CONDITIONAL EXPRESSION                        00614001
                                   7252=*       CONTEXT             EXPRESSION                                   00615001
                                   7253=*       SOURCE OPERATOR     'IF'                                         00616001
                                   7254=*       STACK OPERATOR      SEE EXPRESSION CONTEXT MATRIX                00617001
                                   7255=*       OPERANDS            NONE OR ONE                                  00618001
                                   7256=*                                                                        00619001
                R:C  047D8         7257=        USING CP73,R12                                                   00620001
0047D8 9101 D080      00080        7258=CP73    TM    COMPFLGS,OPERAND           OPERAND ON ?                    00621001
0047DC 4780 C026            047FE  7259=        BZ    JGB2                       NO, BRANCH                      00622001
0047E0 4540 5304            0034C  7260=        BAL   R4,SERR4                   ERROR PATTERN ENTRY             00623001
0047E4 00A1                        7261=        DC    H'161'                     ERROR 161                       00624001
                                   7262=*                                                                        00625001
0047E6 4190 9005            00005  7263=        LA    R9,5(,R9)                  RELEASE ONE OPERAND             00626001
0047EA 4540 5E30            00E78  7264=JGE1    BAL   R4,MOVEOPTK                INCR OPT POINTER                00627001
0047EE 9206 A000      00000        7265=        MVI   0(R10),XFLBRAC             INSERT '(' INTO STACK           00628001
0047F2 4540 5E30            00E78  7266=        BAL   R4,MOVEOPTK                INCR OPT POINTER                00629001
0047F6 D200 A000 8000 00000 00000  7267=        MVC   0(1,R10),0(R8)             INSERT SOURCE INTO STACK        00630001
0047FC 07F5                        7268=        BR    R5                         BRANCH TO SUBSTART              00631001
                                   7269=*                                                                        00632001
0047FE 4540 5304            0034C  7270=JGB2    BAL   R4,SERR4                   ERROR PATTERN ENTRY             00633001
004802 00A0                        7271=        DC    H'160'                     ERROR 160                       00634001
                                   7272=*                                                                        00635001
004804 47F0 C012            047EA  7273=        B     JGE1                                                       00636001
                                   7274=*                                                                        00637001
                                   7275=*********************************************************************** 00638001
                                   7276=*                                                                        00639001
                                   7277=*       COMPILER PROGRAM - CP74                                          00640001
                                   7278=*                                                                        00641001
                                   7279=*********************************************************************** 00642001
                                   7280=*                                                                        00643001
                                   7281=*       ERRONEOUS CASE - CONBINATION OF TWO RELATIONAL OPERATORS         00644001
                                   7282=*       CONTEXT             EXPRESSION                                   00645001
                                   7283=*       SOURCE OPERATORS    RELATIONAL OPERATOR                          00646001
                                   7284=*       STACK OPERATORS     RELATIONAL OPERATOR                          00647001
                                   7285=*       OPERANDS            NONE OR ONE                                  00648001
                                   7286=*                                                                        00649001
                R:C  04808         7287=        USING CP74,R12                                                   00650001
004808 9101 D080      00080        7288=CP74    TM    COMPFLGS,OPERAND           OPERAND ON ?                    00651001
00480C 4780 C018            04820  7289=        BZ    JIB2                       NO, BRANCH                      00652001
004810 4540 5304            0034C  7290=        BAL   R4,SERR4                   ERROR PATTERN ENTRY             00653001
004814 00A1                        7291=        DC    H'161'                     ERROR 161                       00654001
                                   7292=*                                                                        00655001
004816 4540 5E30            00E78  7293=JIF2    BAL   R4,MOVEOPTK                INCR OPT POINTER                00656001
00481A 9202 A000      00000        7294=        MVI   0(R10),XFASTER             INSERT * INTO STACK             00657001
00481E 07F5                        7295=        BR    R5                         BRANCH TO SUBSTART              00658001
                                   7296=*                                                                        00659001
004820 4540 5304            0034C  7297=JIB2    BAL   R4,SERR4                   ERROR PATTERN ENTRY             00660001
004824 00A0                        7298=        DC    H'160'                     ERROR 160                       00661001
                                   7299=*                                                                        00662001
004826 4540 5D02            00D4A  7300=        BAL   R4,STACKAPI                STACK ALL PURPOSE IDENT         00663001
00482A 47F0 C00E            04816  7301=        B     JIF2                                                       00664001
                                   7302=*                                                                        00665001
                                   7303=*********************************************************************** 00666001
                                   7304=*                                                                        00667001
                                   7305=*       COMPILER PROGRAM - CP74                                          00668001
                                   7306=*                                                                        00669001
                                   7307=*********************************************************************** 00670001
                                   7308=*                                                                        00671001
                                   7309=*       ERRONEOUS CASE - NOT PERMITED OPERATOR PAIR WHERE THE STACK      00672001
                                   7310=*                        OPERATOR IS ASSUMED TO BE THE CORRECT ONE       00673001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   7311=*        CONTEXT            PROGRAM, STATEMENT, EXPRESSION             00674001
                                   7312=*        SOURCE OPERATOR    SEE CONTEXT MATRICES                       00675001
                                   7313=*        STACK OPERATOR     SEE CONTEXT MATRICES                       00676001
                                   7314=*        OPERANDS           NONE OR ONE                                00677001
                                   7315=*                                                                      00678001
                  R:C  0482E       7316=         USING CP75,R12                                                00679001
00482E 9101 D080      00080        7317=CP75     TM    COMPFLGS,OPERAND        OPERAND ON ?                    00680001
004832 4780 C014            04842  7318=         BZ    JKB2                    NO, BRANCH                      00681001
004836 4540 5318            00360  7319=         BAL   R4,SERR3                ERROR PATTERN ENTRY             00682001
00483A 00C3                        7320=         DC    H'195'                  ERROR 195                       00683001
                                   7321=*                                                                      00684001
00483C 4190 9005            00005  7322=         LA    R9,5(,R9)               RELEASE ONE OPERAND             00685001
004840 07F5                        7323=         BR    R5                      BRANCH TO SUBSTART              00686001
                                   7324=*                                                                      00687001
004842 4540 5318            00360  7325=JKB2     BAL   R4,SERR3                ERROR PATTERN ENTRY             00688001
004846 00C2                        7326=         DC    H'194'                  ERROR 194                       00689001
                                   7327=*                                                                      00690001
004848 07F5                        7328=         BR    R5                      BRANCH TO SUBSTART              00691001
                                   7329=*                                                                      00692001
                                   7330=*********************************************************************** 00693001
                                   7331=*                                                                      00694001
                                   7332=*        COMPILER PROGRAM - CP76                                       00695001
                                   7333=*                                                                      00696001
                                   7334=*********************************************************************** 00697001
                                   7335=*                                                                      00698001
                                   7336=*        BOOLEAN OPERATIONS                                            00699001
                                   7337=*        CONTEXT            EXPRESSION                                 00700001
                                   7338=*        SOURCE OPERATOR    SEE EXPRESSION CONTEXT MATRIX              00701001
                                   7339=*        STACK  OPERATOR    SEE EXPRESSION CONTEXT MATRIX              00702001
                                   7340=*        OPERAND            TWO OPERANDS                               00703001
                                   7341=*                                                                      00704001
                  R:C  0484A       7342=         USING CP76,R12                                                00705001
00484A 4140 C096            048E0  7343=CP76     LA    R4,JRF41                                                00706001
00484E 4530 5F08            00F50  7344=         BAL   R3,OPDTEST              OPDT AND ERROR 162              00707001
004852 4540 5EE4            00F2C  7345=         BAL   R4,ARRTEST2                                             00708001
004856 9103 9006      00006        7346=         TM    6(R9),X'03'             BLO BOOLEAN ?                   00709001
00485A 47E0 C1F0            04A3A  7347=         BNO   JMC2                    NO, BRANCH                      00710001
00485E 9103 9001      00001        7348=         TM    1(R9),X'03'             LO BOOLEAN ?                    00711001
004862 47E0 C206            04A50  7349=         BNO   JMC3                    NO, BRANCH                      00712001
004866 9180 D080      00080        7350=         TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?             00713001
00486A 4710 C096            048E0  7351=         BO    JRF41                   YES, BRANCH                     00714001
00486E 4540 578A            007D2  7352=         BAL   R4,OPDREC               OPERAND RECOGNIZER (LO)         00715001
004872 4190 9005            00005  7353=         LA    R9,5(,R9)               DECREASE OPERAND POINTER        00716001
004876 4540 578A            007D2  7354=         BAL   R4,OPDREC               OPERAND RECOGNIZER (BLO)        00717001
00487A 4B90 5170            001B8  7355=         SH    R9,KH5                  INCREASE OPERAND POINTER        00718001
00487E 91A0 9005      00005        7356=         TM    5(R9),X'A0'             BLO A VALUE OR IN STACK ?       00719001
004882 4770 C138            04982  7357=         BNZ   JOB1                    NO, BRANCH                      00720001
004886 D201 DA6E 9008 00A6E 00008  7358=         MVC   YPLACE(2),8(R9)         Y = DISP(BLO)                   00721001
00488C 96A0 DA6E      00A6E        7359=         OI    YPLACE,X'A0'            X = CDSA                        00722001
004890 9120 9000      00000        7360=JNE1     TM    0(R9),X'20'             LO A VALUE ?                    00723001
004894 4710 C130            0497A  7361=         BO    JNE5                    NO, BRANCH                      00724001
004898 9180 9000      00000        7362=         TM    0(R9),X'80'             LO IN STACK ?                   00725001
00489C 4710 C0C4            0490E  7363=         BO    JNF2                    NO, BRANCH                      00726001
0048A0 D201 DA6A 9003 00A6A 00003  7364=         MVC   WPLACE(2),3(R9)         W = DISP(LO)                    00727001
0048A6 96A0 DA6A      00A6A        7365=         OI    WPLACE,X'A0'            V = CDSA                        00728001
0048AA D201 C086 DA6E 048D0 00A6E  7366=JRB3     MVC   JRC3+2(2),YPLACE        PREPARE INSTRUCTION             00729001
0048B0 D201 C088 DA6A 048D2 00A6A  7367=         MVC   JRC3+4(2),WPLACE                                        00730001
0048B6 9102 A000      00000        7368=         TM    0(R10),X'02'            OPT 'IMPL' OR 'EQUIV' ?         00731001
0048BA 4780 C0A6            048F0  7369=         BZ    JRC4                    YES, BRANCH                     00732001
0048BE 9101 A000      00000        7370=         TM    0(R10),X'01'            OPT AND ?                       00733001
0048C2 4710 C09E            048E8  7371=         BO    JRC2                    YES, BRANCH                     00734001
0048C6 92D6 C084      048CE        7372=JRC22    MVI   JRC3,X'D6'              PREPARE INSTRUCTION             00735001
0048CA 4520 55A6            005EE  7373=JRC21    BAL   R2,GENTXT6              GENERATE 6 BYTES                00736001
0048CE D600 0000 0000 00000 00000  7374=JRC3     OC    0(1,0),0(0)             *** GENERATED CODE ***          00737001
0048D4 940F DA6E      00A6E        7375=JRF4     NI    YPLACE,X'0F'            CLEAR REGISTER NUMBER           00738001
0048D8 4870 DA6E            00A6E  7376=         LH    R7,YPLACE               LOAD VALUE OF OBJ ST POINT      00739001
0048DC 9608 9005      00005        7377=         OI    5(R9),X'08'             INSERT NO-ASSIGNMENT BIT        00740001
0048E0 4190 9005            00005  7378=JRF41    LA    R9,5(,R9)               CLOPD                           00741001
0048E4 46A0 5060            000A8  7379=JRG4     BCT   R10,COMP                CLOPT AND COMPARE               00742001
0048E8 92D4 C084      048CE        7380=JRC2     MVI   JRC3,X'D4'              INSERT OPER CODE INTO CODE      00743001
0048EC 47F0 C080            048CA  7381=         B     JRC21                                                   00744001
                                   7382=*                                                                      00745001
0048F0 D201 C0B2 C086 048FC 048D0  7383=JRC4     MVC   JRC41+2(2),JRC3+2       PREPARE INSTRUCTION             00746001
0048F6 4520 55A2            005EA  7384=         BAL   R2,GENTXT4              GENERATE 4 BYTES                00747001
0048FA 9701 0000      00000        7385=JRC41    XI    0(0),X'01'              *** GENERATED CODE ***          00748001
0048FE 9521 A000      00000        7386=         CLI   0(R10),X'21'            OPT EQUIV ?                     00749001
004902 4780 C07C            048C6  7387=         BE    JRC22                   YES, BRANCH                     00750001
004906 92D7 C084      048CE        7388=         MVI   JRC3,X'D7'              INSERT OPER-CODE INTO CODE      00751001
00490A 47F0 C080            048CA  7389=         B     JRC21                                                   00752001
                                   7390=*                                                                      00753001
00490E 91FF 9002      00002        7391=JNF2     TM    2(R9),X'FF'             LO A CONSTANT ?                 00754001
004912 4770 C122            0496C  7392=         BNZ   JNF4                    NO, BRANCH                      00755001
004916 D200 C0F5 9004 0493F 00004  7393=JSB3     MVC   JSE3+1(1),4(R9)         PREPARE INTRUCTION              00756001
00491C 9401 C0F5      0493F        7394=         NI    JSE3+1,X'01'                                            00757001
004920 D201 C0F6 DA6E 04940 00A6E  7395=         MVC   JSE3+2(2),YPLACE                                        00758001
004926 9102 A000      00000        7396=         TM    0(R10),X'02'            WHICH OPT                       00759001
00492A 4780 C104            0494E  7397=         BZ    JSE4                    EQU OR IMPL, BRANCH             00760001
00492E 9101 A000      00000        7398=         TM    0(R10),X'01'            OPT AND ?                       00761001
004932 4710 C0FC            04946  7399=         BO    JSE2                    YES, BRANCH                     00762001
004936 9296 C0F4      0493E        7400=JSE22    MVI   JSE3,X'96'              PREPARE INSTRUCTION             00763001
00493A 4520 55A2            005EA  7401=JSE21    BAL   R2,GENTXT4              GENERATE 4 BYTES                00764001
00493E 9600 0000      00000        7402=JSE3     OI    0(0),X'00'              *** GENERATED CODE ***          00765001
004942 47F0 C08A            048D4  7403=         B     JRF4                                                    00766001
                                   7404=*                                                                      00767001
004946 9294 C0F4      0493E        7405=JSE2     MVI   JSE3,X'94'              PREPARE INSTRUCTION             00768001
00494A 47F0 C0F0            0493A  7406=         B     JSE21                                                   00769001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

                                   7407=*                                                               00770001
00494E D201 C110 C0F6 0495A 04940  7408=JSE4      MVC   JSE41+2(2),JSE3+2        PREPARE INSTRUCTION        00771001
004954 4520 55A2            005EA  7409=          BAL   R2,GENTXT4               GENERATE 4 BYTES           00772001
004958 9701 0000      00000        7410=JSE41     XI    0(0),X'01'               *** GENERATED CODE ***     00773001
00495C 9521 A000      00000        7411=          CLI   0(R10),X'21'             OPT EQUIV ?                00774001
004960 4780 C0EC            04936  7412=          BE    JSE22                    YES, BRANCH                00775001
004964 9297 C0F4      0493E        7413=          MVI   JSE3,X'97'               PREPARE INSTRUCTION        00776001
004968 47F0 C0F0            0493A  7414=          B     JSE21                                               00777001
                                   7415=*                                                               00778001
00496C 4540 593C            00984  7416=JNF4      BAL   R4,ROUTINE1              CALL ROUTINE NUMBER 1      00779001
004970 D300 DA6A DA72 00A6A 00A72  7417=JNF41     MVZ   WPLACE(1),VPLACE         PREPARE W-V-PLACE          00780001
004976 47F0 C060            048AA  7418=          B     JRB3                                                00781001
                                   7419=*                                                               00782001
00497A 4540 59F2            00A3A  7420=JNE5      BAL   R4,ROUTINE3              CALL ROUTINE NUMBER 3      00783001
00497E 47F0 C126            04970  7421=          B     JNF41                                               00784001
                                   7422=*                                                               00785001
004982 91A0 9000      00000        7423=JOB1      TM    0(R9),X'A0'              LO A VALUE AND IN STACK ?  00786001
004986 4770 C198            049E2  7424=          BNZ   JOC2                     NO, BRANCH                 00787001
00498A D201 DA6E 9003 00A6E 00003  7425=          MVC   YPLACE(2),3(R9)          Y= DISPL(LO)               00788001
004990 96A0 DA6E      00A6E        7426=          OI    YPLACE,X'A0'             X=CDSA                     00789001
004994 9521 A000      00000        7427=          CLI   0(R10),X'21'             OPT IMPL ?                 00790001
004998 4770 C182            049CC  7428=          BNE   JOE2                     NO, BRANCH                 00791001
00499C 4A70 DA56            00A56  7429=          AH    R7,ONEENTRY              RESERVE OBJECT STACK ENTRY 00792001
0049A0 4070 D5F8            005F8  7430=          STH   R7,WORKPL                CHECK MAX                  00793001
0049A4 4540 58BA            00902  7431=          BAL   R4,MAXCH                                            00794001
0049A8 D201 C176 DA6E 049C0 00A6E  7432=          MVC   JOG1+4(2),YPLACE         PREPARE INSTRUCTION        00795001
0049AE D201 C174 D5F8 049BE 005F8  7433=          MVC   JOG1+2(2),WORKPL                                    00796001
0049B4 96A0 C174      049BE        7434=          OI    JOG1+2,X'A0'                                        00797001
0049B8 4520 55A6            005EE  7435=          BAL   R2,GENTXT6               GENERATE 6 BYTES           00798001
0049BC D200 A000 0000 00000 00000  7436=JOG1      MVC   0(1,CDSA),0(0)           *** GENERATED CODE ***     00799001
0049C2 D201 9003 D5F8 00003 005F8  7437=          MVC   3(2,R9),WORKPL           ADJUST OPERAND             00800001
0049C8 47F0 C1AC            049F6  7438=          B     JPB1                                                00801001
                                   7439=*                                                               00802001
0049CC D204 D5F8 9000 005F8 00000  7440=JOE2      MVC   WORKPL(5),0(R9)          CHANGE LO AND BLO          00803001
0049D2 D204 9000 9005 00000 00005  7441=          MVC   0(5,R9),5(R9)                                       00804001
0049D8 D204 9005 D5F8 00005 005F8  7442=          MVC   5(5,R9),WORKPL                                      00805001
0049DE 47F0 C046            04890  7443=          B     JNE1                                                00806001
                                   7444=*                                                               00807001
0049E2 4A70 DA56            00A56  7445=JOC2      AH    R7,ONEENTRY              INCREASE P                 00808001
0049E6 4070 D5F8            005F8  7446=          STH   R7,WORKPL                CHECK MAX                  00809001
0049EA 4540 58BA            00902  7447=          BAL   R4,MAXCH                                            00810001
0049EE 4070 DA6E            00A6E  7448=          STH   R7,YPLACE                Y = DISPL                  00811001
0049F2 96A0 DA6E      00A6E        7449=          OI    YPLACE,X'A0'             X = CDSA                   00812001
0049F6 9120 9005      00005        7450=JPB1      TM    5(R9),X'20'              BLO A VALUE ?              00813001
0049FA 4710 C210            04A5A  7451=          BO    JQB2                     AN ADDR, BRANCH            00814001
0049FE 91FF 9007      00007        7452=          TM    7(R9),X'FF'              BLO A CONSTANT ?           00815001
004A02 4770 C210            04A5A  7453=          BNZ   JQB2                     NO, BRANCH                 00816001
004A06 D200 C1D1 9009 04A1B 00009  7454=          MVC   JQE1+1(1),9(R9)          PREPARE INSTRUCTION        00817001
004A0C 9401 C1D1      04A1B        7455=          NI    JQE1+1,X'01'                                        00818001
004A10 D201 C1D2 DA6E 04A1C 00A6E  7456=          MVC   JQE1+2(2),YPLACE                                    00819001
004A16 4520 55A2            005EA  7457=          BAL   R2,GENTXT4               GENERATE 4 BYTES           00820001
004A1A 9200 A000      00000        7458=JQE1      MVI   0(CDSA),X'00'            *** GENERATED CODE ***     00821001
004A1E 9630 9006      00006        7459=          OI    6(R9),X'30'              ADJUST R9 ENTRY OF BLO     00822001
004A22 945F 9005      00005        7460=JQE2      NI    5(R9),X'5F'                                         00823001
004A26 D200 9007 DA5D 00007 00A5D  7461=          MVC   7(1,R9),SPBNST+1                                    00824001
004A2C D201 9008 DA6E 00008 00A6E  7462=          MVC   8(2,R9),YPLACE                                      00825001
004A32 940F 9008      00008        7463=          NI    8(R9),X'0F'                                         00826001
004A36 47F0 C046            04890  7464=          B     JNE1                                                00827001
                                   7465=*                                                               00828001
004A3A 06A0                        7466=JMC2      BCTR  R10,0                    DECR OPT ST POINTER        00829001
004A3C 4540 5310            00358  7467=          BAL   R4,SERR2                 ERROR PATTERN ENTRY        00830001
004A40 00B6                        7468=          DC    H'182'                   ERROR 182                  00831001
                                   7469=*                                                               00832001
004A42 41A0 A001            00001  7470=          LA    R10,1(,R10)              INCR OPT ST POINT          00833001
004A46 D204 9005 5182 00005 001CA  7471=JMC31     MVC   5(5,R9),API              INSERT ALL PURPOSE IDENT   00834001
004A4C 47F0 C096            048E0  7472=          B     JRF41                                               00835001
                                   7473=*                                                               00836001
004A50 4540 5310            00358  7474=JMC3      BAL   R4,SERR2                 ERROR PATTERN ENTRY        00837001
004A54 00B6                        7475=          DC    H'182'                   ERROR 182                  00838001
                                   7476=*                                                               00839001
004A56 47F0 C1FC            04A46  7477=          B     JMC31                                               00840001
                                   7478=*                                                               00841001
004A5A 4190 9005            00005  7479=JQB2      LA    R9,5(,R9)                INCREASE R9                00842001
004A5E 9120 9000      00000        7480=          TM    0(R9),X'20'              BLO A VALUE ?              00843001
004A62 4710 C244            04A8E  7481=          BO    JQB4                                                00844001
004A66 4540 593C            00984  7482=          BAL   R4,ROUTINE1              LOAD W-V-PLACE FOR VALUE   00845001
004A6A 4B90 5170            001B8  7483=JQD3      SH    R9,KH5                   INCREASE OPERAND ST POINTER 00846001
004A6E D201 C23C DA6E 04A86 00A6E  7484=          MVC   JQE3+2(2),YPLACE         PREPARE INSTRUCTION        00847001
004A74 D201 C23E DA6A 04A88 00A6A  7485=          MVC   JQE3+4(2),WPLACE                                    00848001
004A7A D300 C23E DA72 04A88 00A72  7486=          MVZ   JQE3+4(1),VPLACE                                    00849001
004A80 4520 55A6            005EE  7487=          BAL   R2,GENTXT6               GENERATE 6 BYTES           00850001
004A84 D200 0000 0000 00000 00000  7488=JQE3      MVC   0(1,0),0(0)              *** GENERATED CODE ***     00851001
004A8A 47F0 C1D8            04A22  7489=          B     JQE2                                                00852001
                                   7490=*                                                               00853001
004A8E 4540 59F2            00A3A  7491=JQB4      BAL   R4,ROUTINE3                                         00854001
004A92 9640 9000      00000        7492=          OI    0(R9),X'40'              ADJUST OPERAND             00855001
004A96 47F0 C220            04A6A  7493=          B     JQD3                                                00856001
                                   7494=*                                                               00857001
                                   7495=********************************************************************** 00858001
                                   7496=*                                                               00859001
                                   7497=*         COMPILER PROGRAM - CP77                                 00860001
                                   7498=*                                                               00861001
                                   7499=********************************************************************** 00862001
                                   7500=*                                                               00863001
                                   7501=*         LOGICAL OPERATION NOT                                   00864001
                                   7502=*         CONTEXT              EXPRESSION                         00865001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                X390 3.1.04  2012/08/17 13.13

                                     7503=*          SOURCE OPERATOR      ALL EXCEPT 'NOT',(,(/,'IF',ARITHMETIC      00866001
                                     7504=*                               AND RELATIONAL OPERATORS                   00867001
                                     7505=*          STACK OPERATOR       'NOT'                                      00868001
                                     7506=*          OPERANDS             ONE BOOLEAN                                00869001
                                     7507=*                                                                          00870001
                   R:C  04A9A        7508=           USING CP77,R12                                                  00871001
004A9A 4140 C05E             04AF8   7509=CP77       LA    R4,JWB2               LOAD RETURN ADDR                    00872001
004A9E 4530 5F08             00F50   7510=           BAL   R3,OPDTEST            OPDT AND ERROR 162                  00873001
004AA2 4540 5E9A             00EE2   7511=           BAL   R4,ARRTEST1           ARRAY AND PROC TEST                 00874001
004AA6 9103 9001       00001         7512=           TM    1(R9),X'03'           OPERAND BOOLEAN ?                   00875001
004AAA 4710 C024             04ABE   7513=           BO    JWD1                  YES, BRANCH                         00876001
004AAE 4540 5310             00358   7514=           BAL   R4,SERR2              ERROR PATTERN ENTRY                 00877001
004AB2 00B6                          7515=           DC    H'182'                ERROR 182                           00878001
                                     7516=*                                                                          00879001
004AB4 D204 9000 5182 00000 001CA    7517=JWC4       MVC   0(5,R9),API           INTRODUCE API                       00880001
004ABA 46A0 5060             000A8   7518=JWK3       BCT   R10,COMP              RELEASE OPERATOR AND COMP           00881001
004ABE 9180 D080       00080         7519=JWD1       TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?                 00882001
004AC2 4710 C020             04ABA   7520=           BO    JWK3                  YES, BRANCH                         00883001
004AC6 4540 578A             007D2   7521=           BAL   R4,OPDREC             OPERAND RECOGNIZER                  00884001
004ACA 9120 9000       00000         7522=           TM    0(R9),X'20'           OPERAND A VALUE ?                   00885001
004ACE 4710 C0EC             04B86   7523=           BO    JWF2                  AN ADDR, BRANCH                     00886001
004AD2 91FF 9002       00002         7524=           TM    2(R9),X'FF'           OPERAND A VARIABLE ?                00887001
004AD6 4780 C0A6             04B40   7525=           BZ    JWH1                  CONSTANT, BRANCH                    00888001
004ADA 9180 9000       00000         7526=           TM    0(R9),X'80'           OPERAND IN OBJ STACK ?              00889001
004ADE 4710 C062             04AFC   7527=           BO    JWG3                  NO, BRANCH                          00890001
004AE2 D201 C058 9003 04AF2 00003    7528=JWH21      MVC   JWH2+2(2),3(R9)       PREPARE INSTRUCTION                 00891001
004AE8 96A0 C058       04AF2         7529=           OI    JWH2+2,X'A0'          INTRODUCE CDSA                      00892001
004AEC 4520 55A2             005EA   7530=           BAL   R2,GENTXT4            GENERATE 4 BYTES                    00893001
004AF0 9701 A000       00000         7531=JWH2       XI    0(CDSA),X'01'         *** GENERATED CODE ***              00894001
004AF4 9608 9000       00000         7532=JWH3       OI    0(R9),X'08'           INSERT NO ASSIGMENT BIT             00895001
004AF8 46A0 5060             000A8   7533=JWB2       BCT   R10,COMP              RELEASE OPERATOR AND COMP           00896001
004AFC 4540 593C             00984   7534=JWG3       BAL   R4,ROUTINE1           LOAD W-V-PLACE FOR VALUE            00897001
004B00 4A70 DA56             00A56   7535=JWG31      AH    R7,ONEENTRY           RESERVE OBJECT STACK ENTRY          00898001
004B04 4070 D5F8             005F8   7536=           STH   R7,WORKPL             STORE P INTO WORKPL                 00899001
004B08 4540 58BA             00902   7537=           BAL   R4,MAXCH              CHECK MAXIMUM                       00900001
004B0C 945F 9000       00000         7538=           NI    0(R9),X'5F'           ADJUST OPERAND                      00901001
004B10 D201 9003 D5F8 00003 005F8    7539=           MVC   3(2,R9),WORKPL        INSERT OBJ STACK DISPLACEMENT       00902001
004B16 D200 9002 DA5D 00002 00A5D    7540=           MVC   2(1,R9),SPBNST+1      INSERT BLOCK NUMBER                 00903001
004B1C D201 C09E D5F8 04B38 005F8    7541=           MVC   JWJ3+2(2),WORKPL      PREPARE INSTRUCTION                 00904001
004B22 96A0 C09E       04B38         7542=           OI    JWJ3+2,X'A0'          INSERT CDSA                         00905001
004B26 D201 C0A0 DA6A 04B3A 00A6A    7543=           MVC   JWJ3+4(2),WPLACE      INSERT W-PLACE                      00906001
004B2C D300 C0A0 DA72 04B3A 00A72    7544=           MVZ   JWJ3+4(1),VPLACE      INSERT V-PLACE                      00907001
004B32 4520 55A6             005EE   7545=           BAL   R2,GENTXT6            GENERATE 6 BYTES                    00908001
004B36 D200 A000 0000 00000 00000    7546=JWJ3       MVC   0(1,CDSA),0(0)        *** GENERATED CODE ***              00909001
004B3C 47F0 C048             04AE2   7547=           B     JWH21                                                     00910001
                                     7548=*                                                                          00911001
004B40 4A70 DA56             00A56   7549=JWH1       AH    R7,ONEENTRY           INCREASE P                          00912001
004B44 4070 D5F8             005F8   7550=           STH   R7,WORKPL             STORE P INTO WORKPL                 00913001
004B48 4540 58BA             00902   7551=           BAL   R4,MAXCH              CHECK MAXIMUM                       00914001
004B4C D201 C0D2 D5F8 04B6C 005F8    7552=           MVC   JWK1+2(2),WORKPL      PREPARE INSTRUCTION                 00915001
004B52 96A0 C0D2       04B6C         7553=           OI    JWK1+2,X'A0'          INSERT CDSA                         00916001
004B56 9200 C0D1       04B6B         7554=JWK11      MVI   JWK1+1,X'00'          INSERT FALSE                        00917001
004B5A 9101 9004       00004         7555=           TM    4(R9),X'01'           CONSTANT TRUE ?                     00918001
004B5E 4710 C0CC             04B66   7556=           BO    JWK12                 YES, BRANCH                         00919001
004B62 9201 C0D1       04B6B         7557=           MVI   JWK1+1,X'01'          INSERT TRUE                         00920001
004B66 4520 55A2             005EA   7558=JWK12      BAL   R2,GENTXT4            GENERATE 4 BYTES                    00921001
004B6A 9200 A000       00000         7559=JWK1       MVI   0(CDSA),X'00'         *** GENERATED CODE ***              00922001
004B6E D201 9003 D5F8 00003 005F8    7560=           MVC   3(2,R9),WORKPL        INSERT OBJ DISPLACEMENT             00923001
004B74 945F 9000       00000         7561=           NI    0(R9),X'5F'           ADJUST OPERAND                      00924001
004B78 9630 9001       00001         7562=           OI    1(R9),X'30'           SET OPERAND AS VARIABLE             00925001
004B7C D200 9002 DA5D 00002 00A5D    7563=           MVC   2(1,R9),SPBNST+1      INSERT BLOCK NUMBER                 00926001
004B82 47F0 C05A             04AF4   7564=           B     JWH3                                                      00927001
                                     7565=*                                                                          00928001
004B86 4540 59F2             00A3A   7566=JWF2       BAL   R4,ROUTINE3           LOAD V-W-PLACE FOR ADDR             00929001
004B8A 9640 9000       00000         7567=           OI    0(R9),X'40'           ADJUST OPERAND                      00930001
004B8E 47F0 C066             04B00   7568=           B     JWG31                                                     00931001
                                     7569=*                                                                          00932001
                                     7570=*********************************************************************** 00933001
                                     7571=*                                                                          00934001
                                     7572=*          COMPILER PROGRAM - CP78                                         00935001
                                     7573=*                                                                          00936001
                                     7574=*********************************************************************** 00937001
                                     7575=*                                                                          00938001
                                     7576=*          IF CLAUSE                                                       00939001
                                     7577=*          CONTEXT              EXPRESSION                                 00940001
                                     7578=*          SOURCE OPERATOR      'THEN'                                     00941001
                                     7579=*          STACK OPERATOR       'IF','IFS'                                 00942001
                                     7580=*          OPERANDS             BOOLEAN OPERANDS                           00943001
                                     7581=*                                                                          00944001
                   R:C  04B92        7582=           USING CP78,R12                                                  00945001
004B92 4140 C01A             04BAC   7583=CP78       LA    R4,JZB1                                                   00946001
004B96 4530 5F08             00F50   7584=           BAL   R3,OPDTEST            OPDT AND ERROR 162                  00947001
004B9A 4540 5E9A             00EE2   7585=           BAL   R4,ARRTEST1                                               00948001
004B9E 9103 9001       00001         7586=           TM    1(R9),X'03'           OPERAND BOOLEAN ?                   00949001
004BA2 4710 C030             04BC2   7587=           BO    JYD1                  YES, BRANCH                         00950001
004BA6 4540 5310             00358   7588=           BAL   R4,SERR2              ERROR PATTERN ENTRY                 00951001
004BAA 00B6                          7589=           DC    H'182'                ERROR NR 182                        00952001
                                     7590=*                                                                          00953001
004BAC 9526 A000       00000         7591=JZB1       CLI   0(R10),X'26'          OPERATOR IFS                        00954001
004BB0 D200 A000 8000 00000 00000    7592=           MVC   0(1,R10),0(R8)        INSERT SOURCE INTO STACK            00955001
004BB6 0775                          7593=           BNER  R5                    NO, BRANCH TO SUBSTART              00956001
004BB8 9227 A000       00000         7594=           MVI   0(R10),X'27'          INSERT THENS INTO STACK             00957001
004BBC 4BB0 5180             001C8   7595=           SH    R11,KH614             SWITCH TO PROGRAM CONTEXT           00958001
004BC0 07F5                          7596=           BR    R5                    BRANCH TO SUBSTART                  00959001
                                     7597=*                                                                          00960001
004BC2 9180 D080       00080         7598=JYD1       TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?                 00961001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                         X390 3.1.04  2012/08/17 13.13

004BC6 4710 C01A              04BAC  7599=         BO    JZB1                   YES, BRANCH                       00962001
004BCA 4540 578A              007D2  7600=         BAL   R4,OPDREC              OPERAND RECOGNIZER                00963001
004BCE 9120 9000        00000        7601=         TM    0(R9),X'20'            OPERAND A VALUE ?                 00964001
004BD2 4710 C086              04C18  7602=         BO    JYF2                   AN ADDR, BRANCH                   00965001
004BD6 9180 9000        00000        7603=         TM    0(R9),X'80'            OPERAND IN OBJECT STACK ?         00966001
004BDA 4710 C050              04BE2  7604=         BO    JYH12                  NO, BRANCH                        00967001
004BDE 4B70 DA56              00A56  7605=         SH    R7,ONEENTRY            RELEASE OBJ STACK ENTRY           00968001
004BE2 4540 593C              00984  7606=JYH12    BAL   R4,ROUTINE1            LOAD V-W-PLACE FOR VALUE          00969001
004BE6 D201 C066 DA6A 04BF8 00A6A    7607=JYH11    MVC   JYH1+2(2),WPLACE       INTRODUCE DISPLACEMENT            00970001
004BEC D300 C066 DA72 04BF8 00A72    7608=         MVZ   JYH1+2(1),VPLACE       INSERT V-PLACE INTO CODE          00971001
004BF2 4520 55A2              005EA  7609=         BAL   R2,GENTXT4             GENERATE 4 BYTES                  00972001
004BF6 91FF 0000        00000        7610=JYH1     TM    0(0),X'FF'             *** GENERATED CODE ***            00973001
004BFA 4540 5E70              00EB8  7611=         BAL   R4,LATRES              RESERVE LABEL                     00974001
004BFE D201 9003 D0A2 00003 000A2    7612=         MVC   3(2,R9),LN             INSERT LABEL INTO OPERAND         00975001
004C04 D201 C07E D0A2 04C10 000A2    7613=         MVC   JYJ3+2(2),LN           INSERT LABEL INTO CODE            00976001
004C0A 4520 55A6              005EE  7614=         BAL   R2,GENTXT6             GENERATE 6 BYTES                  00977001
004C0E 58FC 0000              00000  7615=JYJ3     L     BRR,0(LAT,0)           *** GENERATED CODE ***            00978001
004C12 078F                          7616=         BZR   BRR                    *** GENERATED CODE ***            00979001
004C14 47F0 C01A              04BAC  7617=         B     JZB1                                                     00980001
                                     7618=*                                                                       00981001
004C18 4540 59F2              00A3A  7619=JYF2     BAL   R4,ROUTINE3            LOAD W-V-PLACE FOR ADDR           00982001
004C1C 47F0 C054              04BE6  7620=         B     JYH11                                                    00983001
                                     7621=*                                                                       00984001
                                     7622=*********************************************************************** 00985001
                                     7623=*                                                                       00986001
                                     7624=*        COMPILER PROGRAM - CP78                                        00987001
                                     7625=*                                                                       00988001
                                     7626=*********************************************************************** 00989001
                                     7627=*                                                                       00990001
                                     7628=*        END OF CONDITIONAL EXPRESSION                                  00991001
                                     7629=*        CONTEXT             EXPRESSION                                 00992001
                                     7630=*        SOURCE OPERATOR     SEE EXPTESSION CONTEXT  MATRIX             00993001
                                     7631=*        STACK OPERATOR      'ELSE'                                     00994001
                                     7632=*        OPERANDS            TWO OPERANDS AND ONE LABEL                 00995001
                                     7633=*                                                                       00996001
                  R:C  04C20         7634=         USING CP79,R12                                                 00997001
004C20 4140 C082              04CA2  7635=CP79     LA    R4,KBB2                LOAD RETURN ADDR                  00998001
004C24 4530 5F08              00F50  7636=         BAL   R3,OPDTEST             OPDT AND ERROR 162                00999001
004C28 4540 5E9A              00EE2  7637=         BAL   R4,ARRTEST1                                              01000001
004C2C 9103 9001        00001        7638=         TM    1(R9),X'03'            LO BOOLEAN ?                      01001001
004C30 4710 C090              04CB0  7639=         BO    KBD1                   YES, BRANCH                       01002001
004C34 4740 C170              04D90  7640=         BM    KCB11                                                    01003001
004C38 9108 9001        00001        7641=         TM    1(R9),X'08'            LO A LABEL ?                      01004001
004C3C 4780 C078              04C98  7642=         BZ    KFB2                   NO, BRANCH                        01005001
004C40 9108 9006        00006        7643=         TM    6(R9),X'08'            BLD A LABEL ?                     01006001
004C44 4780 C0A0              04CC0  7644=         BZ    KBD2                   NO, BRANCH                        01007001
004C48 9180 D080        00080        7645=         TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?               01008001
004C4C 4710 C0F4              04D14  7646=         BO    KBD31                  YES, BRANCH                       01009001
004C50 4540 578A              007D2  7647=         BAL   R4,OPDREC                                                01010001
004C54 9140 9001        00001        7648=         TM    1(R9),X'40'                                              01011001
004C58 4710 C0A0              04CC0  7649=         BO    KBD2                                                     01012001
004C5C 9180 9003        00003        7650=         TM    3(R9),X'80'                                              01013001
004C60 4710 C0D4              04CF4  7651=         BO    KBH1                   YES, BRANCH                       01014001
004C64 D201 C072 9003 04C92 00003    7652=KFE1     MVC   KFE11+2(2),3(R9)       PREPARE INSTRUCTION               01015001
004C6A 9601 DA46        00A46        7653=         OI    RII,X'01'                                                01016001
004C6E 1BFF                          7654=         SR    R15,R15                PREPARE INSTRUCTION               01017001
004C70 43F9 0002              00002  7655=         IC    R15,2(R9)                                                01018001
004C74 89F0 0003              00003  7656=         SLL   R15,3                                                    01019001
004C78 40F0 D5F8              005F8  7657=         STH   R15,WORKPL                                               01020001
004C7C D201 C076 D5F8 04C96 005F8    7658=         MVC   KFE12+2(2),WORKPL                                        01021001
004C82 4120 C070              04C90  7659=         LA    R2,KFE11                                                 01022001
004C86 45E0 5588              005D0  7660=         BAL   R14,GENTXTS                                              01023001
004C8A 0008                          7661=         DC    H'8'                   GENERATE 8 BYTES                  01024001
                                     7662=*                                                                       01025001
004C8C 47F0 C0D4              04CF4  7663=         B     KBH1                                                     01026001
                                     7664=*                                                                       01027001
004C90 588C 0000              00000  7665=KFE11    L     ADR,0(LAT,0)           *** GENERATED CODE ***            01028001
004C94 589B 0000              00000  7666=KFE12    L     GDSA,0(PBT,0)          *** GENERATED CODE ***            01029001
                                     7667=*                                                                       01030001
004C98 4540 5380              003C8  7668=KFB2     BAL   R4,SERR1                                                 01031001
004C9C 00B2                          7669=         DC    H'178'                 ERROR 178                         01032001
                                     7670=*                                                                       01033001
004C9E 47F0 C0A6              04CC6  7671=         B     KBD3                                                     01034001
                                     7672=*                                                                       01035001
004CA2 4190 900A              0000A  7673=KBB2     LA    R9,10(,R9)             CLEAR TWO OPERANDS                01036001
004CA6 D204 9000 5182 00000 001CA    7674=KBD4     MVC   0(5,R9),API            INTRODUCE API                     01037001
004CAC 46A0 5060              000A8  7675=KBJ4     BCT   R10,COMP               CLOPT AND COMPARE                 01038001
004CB0 9103 9006        00006        7676=KBD1     TM    6(R9),X'03'            BLO BOOLEAN ?                     01039001
004CB4 4710 C0AE              04CCE  7677=         BO    KBE1                   YES, BRANCH                       01040001
004CB8 9110 9000        00000        7678=         TM    0(R9),APIMASK          LO AN API ?                       01041001
004CBC 4710 C0A6              04CC6  7679=         BO    KBD3                   YES, BRANCH                       01042001
004CC0 4540 5380              003C8  7680=KBD2     BAL   R4,SERR1                                                 01043001
004CC4 00A5                          7681=         DC    H'165'                 ERROR 165                         01044001
                                     7682=*                                                                       01045001
004CC6 4190 900A              0000A  7683=KBD3     LA    R9,10(,R9)             CLEAR TWO OPERANDS                01046001
004CCA 47F0 C086              04CA6  7684=         B     KBD4                                                     01047001
                                     7685=*                                                                       01048001
004CCE 9180 D080        00080        7686=KBE1     TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?               01049001
004CD2 4710 C0F4              04D14  7687=         BO    KBD31                  YES, BRANCH                       01050001
004CD6 4540 578A              007D2  7688=         BAL   R4,OPDREC              OPERAND RECOGNIZER                01051001
004CDA 9120 9000        00000        7689=         TM    0(R9),X'20'                                              01052001
004CDE 4710 C148              04D68  7690=         BO    KBF4                                                     01053001
004CE2 9180 9000        00000        7691=         TM    0(R9),X'80'            LO IN STACK ?                     01054001
004CE6 4710 C12C              04D4C  7692=         BO    KBF3                   NO, BRANCH                        01055001
004CEA D501 9003 9008 00003 00008    7693=         CLC   3(2,R9),8(R9)          LO AND BLO IN=PLACE ?             01056001
004CF0 4770 C10A              04D2A  7694=         BNE   KBG2                   NO, BRANCH                        01057001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

004CF4 D201 D5F8 9008 005F8 00008  7695=KBH1      MVC   WORKPL(2),8(R9)         LOAD LAST P                 01058001
004CFA 940F D5F8       005F8       7696=          NI    WORKPL,X'0F'                                        01059001
004CFE 4870 D5F8             005F8 7697=          LH    R7,WORKPL                                           01060001
004D02 D201 D5F8 900D 005F8 0000D  7698=KBH11     MVC   WORKPL(2),13(R9)        TRANSFER PRPOINT TO LAT     01061001
004D08 48F0 D5F8             005F8 7699=          LH    R15,WORKPL              ENTRY INDICATED BY R9+13    01062001
004D0C 58E0 D61C             0061C 7700=          L     R14,LATAB                                           01063001
004D10 506E F000             00000 7701=          ST    R6,0(R14,R15)                                       01064001
004D14 D204 900A 9005 0000A 00005  7702=KBD31     MVC   10(5,R9),5(R9)          C(R9+10)=C(R9+5)            01065001
004D1A 4190 900A             0000A 7703=          LA    R9,10(,R9)              CLEAR TWO OPERANDS          01066001
004D1E 92FF DA61       00A61       7704=          MVI   GPBN+1,X'FF'                                        01067001
004D22 9608 9000       00000       7705=          OI    0(R9),X'08'                                         01068001
004D26 46A0 5060             000A8 7706=          BCT   R10,COMP                CLOPT AND COMPARE           01069001
004D2A D201 C126 9003 04D46 00003  7707=KBG2      MVC   KBG21+4(2),3(R9)        PREPARE INSTRUCTION         01070001
004D30 96A0 C126       04D46       7708=          OI    KBG21+4,X'A0'                                       01071001
004D34 D201 C124 9008 04D44 00008  7709=KBG22     MVC   KBG21+2(2),8(R9)                                    01072001
004D3A 96A0 C124       04D44       7710=          OI    KBG21+2,X'A0'                                       01073001
004D3E 4520 55A6             005EE 7711=          BAL   R2,GENTXT6              GENERATE 6 BYTES            01074001
004D42 D200 A000 A000 00000 00000  7712=KBG21     MVC   0(1,CDSA),0(CDSA)       *** GENERATED CODE ***      01075001
004D48 47F0 C0D4             04CF4 7713=          B     KBH1                                                01076001
                                   7714=*                                                                   01077001
004D4C 91FF 9002       00002       7715=KBF3      TM    2(R9),X'FF'             LO A CONSTANT ?             01078001
004D50 4780 C150             04D70 7716=          BZ    KBG3                    YES, BRANCH                 01079001
004D54 4540 593C             00984 7717=          BAL   R4,ROUTINE1             CALL ROUTINE NUMBER 1       01080001
004D58 D201 C126 DA6A 04D46 00A6A  7718=KBH3      MVC   KBG21+4(2),WPLACE       PREPARE INSTRUCTION         01081001
004D5E D300 C126 DA72 04D46 00A72  7719=          MVZ   KBG21+4(1),VPLACE                                   01082001
004D64 47F0 C114             04D34 7720=          B     KBG22                                               01083001
                                   7721=*                                                                   01084001
004D68 4540 59F2             00A3A 7722=KBF4      BAL   R4,ROUTINE3             CALL ROUTINE NUMBER 3       01085001
004D6C 47F0 C138             04D58 7723=          B     KBH3                                                01086001
                                   7724=*                                                                   01087001
004D70 D200 C169 9004 04D89 00004  7725=KBG3      MVC   KBG31+1(1),4(R9)        PREPARE INSTRUCTION         01088001
004D76 9401 C169       04D89       7726=          NI    KBG31+1,X'01'                                       01089001
004D7A D201 C16A 9008 04D8A 00008  7727=          MVC   KBG31+2(2),8(R9)                                    01090001
004D80 96A0 C16A       04D8A       7728=          OI    KBG31+2,X'A0'                                       01091001
004D84 4520 55A2             005EA 7729=          BAL   R2,GENTXT4              GENERATE 4 BYTES            01092001
004D88 9200 A000       00000       7730=KBG31     MVI   0(CDSA),X'00'           *** GENERATED CODE ***      01093001
004D8C 47F0 C0D4             04CF4 7731=          B     KBH1                                                01094001
                                   7732=*                                                                   01095001
004D90 9140 9005       00005       7733=KCB11     TM    5(R9),X'40'                                         01096001
004D94 4780 C1C0             04DE0 7734=          BZ    KCB1                                                01097001
004D98 D300 9008 900A 00008 0000A  7735=          MVZ   8(1,R9),10(R9)                                      01098001
004D9E 1BEE                        7736=          SR    R14,R14                                             01099001
004DA0 41F0 0001             00001 7737=          LA    R15,1                                               01100001
004DA4 97C0 9005       00005       7738=          XI    5(R9),X'C0'                                         01101001
004DA8 43E9 0008             00008 7739=          IC    R14,8(R9)                                           01102001
004DAC 88E0 0004             00004 7740=          SRL   R14,4                                               01103001
004DB0 9102 9006       00006       7741=          TM    6(R9),X'02'                                         01104001
004DB4 4780 C1B0             04DD0 7742=          BZ    KCB12                                               01105001
004DB8 42E0 DA45             00A45 7743=          STC   R14,CIR+1                                           01106001
004DBC 88E0 0001             00001 7744=          SRL   R14,1                                               01107001
004DC0 89F0 E000             00000 7745=          SLL   R15,0(R14)                                          01108001
004DC4 42F0 C1A9             04DC9 7746=          STC   R15,KCE112+1            SET OR MASK                 01109001
004DC8 9600 DA49       00A49       7747=KCE112    OI    RIR+1,X'00'                                         01110001
004DCC 47F0 C1C0             04DE0 7748=          B     KCB1                                                01111001
                                   7749=*                                                                   01112001
004DD0 89F0 E000             00000 7750=KCB12     SLL   R15,0(R14)                                          01113001
004DD4 42F0 C1B9             04DD9 7751=          STC   R15,KCB13+1                                         01114001
004DD8 9600 DA47       00A47       7752=KCB13     OI    RII+1,X'00'                                         01115001
004DDC 42E0 DA43             00A43 7753=          STC   R14,CII+1                                           01116001
004DE0 9103 9006       00006       7754=KCB1      TM    6(R9),X'03'             BLO REAL OR INTEGER ?       01117001
004DE4 47B0 C3FA             0501A 7755=          BNM   KBD21                   NO, BRANCH                  01118001
004DE8 9180 D080       00080       7756=          TM    COMPFLGS,COMPMODE       SYNTAX CHECK MODE ?         01119001
004DEC 4710 C0F4             04D14 7757=          BO    KBD31                   YES, BRANCH                 01120001
004DF0 4540 578A             007D2 7758=KCE1      BAL   R4,OPDREC               OPERAND RECOGNIZER          01121001
004DF4 9102 9001       00001       7759=          TM    1(R9),X'02'             LO REAL ?                   01122001
004DF8 4780 C336             04F56 7760=          BZ    KEB1                    YES, BRANCH                 01123001
004DFC 9102 9006       00006       7761=          TM    6(R9),X'02'             BLO REAL ?                  01124001
004E00 4780 C2A0             04EC0 7762=          BZ    KDB1                    INTEGER, BRANCH             01125001
004E04 4140 C282             04EA2 7763=          LA    R4,KCF4                                             01126001
004E08 4530 5CB4             00CFC 7764=          BAL   R3,ROUTIN15             CALL ROUTINE NUMBER 15      01127001
004E0C D201 D5F8 DA50 005F8 00A50  7765=KCE11     MVC   WORKPL(2),ZEROHW                                    01128001
004E12 D300 D5F8 9008 005F8 00008  7766=          MVZ   WORKPL(1),8(R9)         CHECK IF LO AND BLO ARE     01129001
004E18 D300 D5F9 9003 005F9 00003  7767=          MVZ   WORKPL+1(1),3(R9)       LOADED IN THE SAME FPR      01130001
004E1E D500 D5F8 D5F9 005F8 005F9  7768=          CLC   WORKPL(1),WORKPL+1                                  01131001
004E24 4770 C222             04E42 7769=          BNE   KCF2                    NO, BRANCH                  01132001
004E28 1BEE                        7770=          SR    R14,R14                 INTRODUCE R9 ADD IN RUTR    01133001
004E2A 43E0 D5F8             005F8 7771=          IC    R14,WORKPL                                          01134001
004E2E 88E0 0003             00003 7772=          SRL   R14,3                                               01135001
004E32 4190 900A             0000A 7773=KCG11     LA    R9,10(0,R9)                                         01136001
004E36 509E D5E4             005E4 7774=          ST    R9,RUTR(R14)                                        01137001
004E3A 4B90 5176             001BE 7775=          SH    R9,KH10                                             01138001
004E3E 47F0 C0D4             04CF4 7776=          B     KBH1                                                01139001
                                   7777=*                                                                   01140001
004E42 1BEE                        7778=KCF2      SR    R14,R14                 LOAD FPR NUMBER OF LO       01141001
004E44 43E0 D5F9             005F9 7779=          IC    R14,WORKPL+1                                        01142001
004E48 88E0 0005             00005 7780=          SRL   R14,5                   PREPARE MASK TO SET RIR     01143001
004E4C 41F0 0001             00001 7781=          LA    R15,1                                               01144001
004E50 89F0 E000             00000 7782=          SLL   R15,0(R14)                                          01145001
004E54 42F0 C23D             04E5D 7783=          STC   R15,KCF21+1                                         01146001
004E58 97FF C23D       04E5D       7784=          XI    KCF21+1,X'FF'                                       01147001
004E5C 9400 DA49       00A49       7785=KCF21     NI    RIR+1,X'00'                                         01148001
004E60 89E0 0001             00001 7786=          SLL   R14,1                         PREPARE INSTRUCTION   01149001
004E64 42E0 C253             04E73 7787=          STC   R14,KCG2+1                                          01150001
004E68 D600 C253 D5F8 04E73 005F8  7788=          OC    KCG2+1(1),WORKPL                                    01151001
004E6E 4520 5598             005E0 7789=          BAL   R2,GENTXTP2             GENERATE 2 BYTES            01152001
004E72 2800                        7790=KCG2      LDR   0,0                     *** GENERATED CODE ***      01153001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

004E74 1BEE                          7791=KCH21    SR    R14,R14                                             01154001
004E76 43E9 0008               00008 7792=         IC    R14,8(R9)             SET TO ONE RIR                01155001
004E7A 88E0 0005               00005 7793=         SRL   R14,5                                               01156001
004E7E 41F0 0001               00001 7794=         LA    R15,1                                               01157001
004E82 89F0 E000               00000 7795=         SLL   R15,0(R14)                                          01158001
004E86 42F0 C26B               04E8B 7796=         STC   R15,KCH2+1                                          01159001
004E8A 9600 DA49         00A49       7797=KCH2     OI    RIR+1,X'00'                                         01160001
004E8E 89E0 0001               00001 7798=         SLL   R14,1                 SET CIR                       01161001
004E92 42E0 DA45               00A45 7799=         STC   R14,CIR+1                                           01162001
004E96 89E0 0001               00001 7800=         SLL   R14,1                                               01163001
004E9A 47F0 C212               04E32 7801=         B     KCG11                                               01164001
                                     7802=*                                                                  01165001
004E9E 4540 593C               00984 7803=KCE4     BAL   R4,ROUTINE1           CALL ROUTINE NUMBER 1         01166001
004EA2 D300 C299 9008 04EB9 00008    7804=KCF4     MVZ   KCH4+1(1),8(R9)       PREPARE INSTRUCTION           01167001
004EA8 D100 C299 DA72 04EB9 00A72    7805=         MVN   KCH4+1(1),VPLACE                                    01168001
004EAE D201 C29A DA6A 04EBA 00A6A    7806=         MVC   KCH4+2(2),WPLACE                                    01169001
004EB4 4520 5594               005DC 7807=         BAL   R2,GENTXTP4           GENERATE 4 BYTES              01170001
004EB8 6800 0000               00000 7808=KCH4     LD    0,0(0,0)              *** GENERATED CODE ***        01171001
004EBC 47F0 C254               04E74 7809=         B     KCH21                                               01172001
                                     7810=*                                                                  01173001
004EC0 4140 C31A               04F3A 7811=KDB1     LA    R4,KDC41                                            01174001
004EC4 4530 5CB4               00CFC 7812=         BAL   R3,ROUTIN15                                         01175001
004EC8 91F0 9003         00003       7813=         TM    3(R9),X'F0'           LO IN FPR0 ?                  01176001
004ECC 4770 C2E8               04F08 7814=         BNZ   KDE31                 NO, BRANCH                    01177001
004ED0 4520 55A6               005EE 7815=KDG11    BAL   R2,GENTXT6            GENERATE 6 BYTES              01178001
004ED4 05F0                          7816=         BALR  BRR,0                 *** GENERATED CODE ***        01179001
004ED6 47F0 F00A               0000A 7817=         B     10(,BRR)              *** GENERATED CODE ***        01180001
004EDA D201 D5F8 900D 005F8 0000D    7818=         MVC   WORKPL(2),13(R9)                                    01181001
004EE0 48F0 D5F8               005F8 7819=         LH    R15,WORKPL                                          01182001
004EE4 58E0 D61C               0061C 7820=         L     R14,LATAB                                           01183001
004EE8 506E F000               00000 7821=         ST    R6,0(R14,R15)                                       01184001
004EEC 4190 9005               00005 7822=         LA    R9,5(,R9)                                           01185001
004EF0 94FE DA49         00A49       7823=         NI    RIR+1,X'FE'                                         01186001
004EF4 4540 545E               004A6 7824=         BAL   R4,TRINRE                                           01187001
004EF8 4190 9005               00005 7825=         LA    R9,5(,R9)                                           01188001
004EFC 5090 D5E4               005E4 7826=         ST    R9,RUTR                                             01189001
004F00 4B90 5176               001BE 7827=         SH    R9,KH10                                             01190001
004F04 47F0 C0F4               04D14 7828=         B     KBD31                                               01191001
                                     7829=*                                                                  01192001
004F08 1BEE                          7830=KDE31    SR    R14,R14               PREPARE INSTRUCTION           01193001
004F0A 43E9 0003               00003 7831=         IC    R14,3(R9)                                           01194001
004F0E 88E0 0004               00004 7832=         SRL   R14,4                                               01195001
004F12 42E0 C315               04F35 7833=         STC   R14,KDF3+1                                          01196001
004F16 88E0 0001               00001 7834=         SRL   R14,1                                               01197001
004F1A 41F0 0001               00001 7835=         LA    R15,1                                               01198001
004F1E 89F0 E000               00000 7836=         SLL   R15,0(R14)                                          01199001
004F22 42F0 D5F8               005F8 7837=         STC   R15,WORKPL                                          01200001
004F26 97FF D5F8         005F8       7838=         XI    WORKPL,X'FF'                                        01201001
004F2A D400 DA49 D5F8 00A49 005F8    7839=         NC    RIR+1(1),WORKPL                                     01202001
004F30 4520 5598               005E0 7840=         BAL   R2,GENTXTP2           GENERATE 2 BYTES              01203001
004F34 2800                          7841=KDF3     LDR   0,0                   *** GENERATED CODE ***        01204001
004F36 47F0 C2B0               04ED0 7842=         B     KDG11                                               01205001
                                     7843=*                                                                  01206001
004F3A D201 C32C DA6A 04F4C 00A6A    7844=KDC41    MVC   KDC4+2(2),WPLACE      PREPARE INSTRUCTION           01207001
004F40 D100 C32B DA72 04F4B 00A72    7845=         MVN   KDC4+1(1),VPLACE                                    01208001
004F46 4520 5594               005DC 7846=         BAL   R2,GENTXTP4           GENERATE 4 BYTES              01209001
004F4A 6800 0000               00000 7847=KDC4     LD    0,0(0,0)              *** GENERATED CODE ***        01210001
004F4E 4A70 DA56               00A56 7848=         AH    R7,ONEENTRY                                         01211001
004F52 47F0 C2B0               04ED0 7849=         B     KDG11                                               01212001
                                     7850=*                                                                  01213001
004F56 9101 9006         00006       7851=KEB1     TM    6(R9),X'01'           BLO INTEGER ?                 01214001
004F5A 4780 C3EE               0500E 7852=         BZ    KEC2                  NO, BRANCH                    01215001
004F5E 4140 C3D0               04FF0 7853=         LA    R4,KEF31                                            01216001
004F62 4530 5CB4               00CFC 7854=         BAL   R3,ROUTIN15           CALL ROUTINE NUMBER 15        01217001
004F66 D201 D5F8 DA50 005F8 00A50    7855=         MVC   WORKPL(2),ZEROHW                                    01218001
004F6C D300 D5F8 9008 005F8 00008    7856=         MVZ   WORKPL(1),8(R9)                                     01219001
004F72 D300 D5F9 9003 005F9 00003    7857=         MVZ   WORKPL+1(1),3(R9)                                   01220001
004F78 D500 D5F8 D5F9 005F8 005F9    7858=         CLC   WORKPL(1),WORKPL+1    LO AND BLO ARE IN THE SAME GPR ? 01221001
004F7E 4770 C37C               04F9C 7859=         BNE   KEF2                  NO, BRANCH                    01222001
004F82 1BEE                          7860=         SR    R14,R14               INTRODUCE R9 ADD IN RUTI      01223001
004F84 43E0 D5F8               005F8 7861=         IC    R14,WORKPL                                          01224001
004F88 88E0 0002               00002 7862=         SRL   R14,2                                               01225001
004F8C 4190 900A               0000A 7863=KEG1     LA    R9,10(0,R9)                                         01226001
004F90 5090 D5C0               005C0 7864=         ST    R9,RUTI                                             01227001
004F94 4B90 5176               001BE 7865=         SH    R9,KH10                                             01228001
004F98 47F0 C0D4               04CF4 7866=         B     KBH1                                                01229001
                                     7867=*                                                                  01230001
004F9C 1BEE                          7868=KEF2     SR    R14,R14               LOAD GPR NR OF LO             01231001
004F9E 43E0 D5F9               005F9 7869=         IC    R14,WORKPL+1                                        01232001
004FA2 88E0 0004               00004 7870=         SRL   R14,4                 PREPARE MASK TO SET RII       01233001
004FA6 41F0 0001               00001 7871=         LA    R15,1                 TO ZERO                       01234001
004FAA 89F0 E000               00000 7872=         SLL   R15,0(R14)                                          01235001
004FAE 42F0 C397               04FB7 7873=         STC   R15,KEF21+1                                         01236001
004FB2 97FF C397         04FB7       7874=         XI    KEF21+1,X'FF'                                       01237001
004FB6 9400 DA47         00A47       7875=KEF21    NI    RII+1,X'00'                                         01238001
004FBA 42E0 C3A9               04FC9 7876=         STC   R14,KEG21+1                                         01239001
004FBE D600 C3A9 D5F8 04FC9 005F8    7877=         OC    KEG21+1(1),WORKPL                                   01240001
004FC4 4520 559E               005E6 7878=         BAL   R2,GENTXT2            GENERATE 2 BYTES              01241001
004FC8 1800                          7879=KEG21    LR    0,0                   *** GENERATED CODE ***        01242001
004FCA 1BEE                          7880=KEH21    SR    R14,R14               SET TO ONE RII                01243001
004FCC 43E9 0008               00008 7881=         IC    R14,8(R9)                                           01244001
004FD0 88E0 0004               00004 7882=         SRL   R14,4                                               01245001
004FD4 41F0 0001               00001 7883=         LA    R15,1                                               01246001
004FD8 89F0 E000               00000 7884=         SLL   R15,0(R14)                                          01247001
004FDC 42F0 C3C1               04FE1 7885=         STC   R15,KEH2+1                                          01248001
004FE0 9600 DA47         00A47       7886=KEH2     OI    RII+1,X'00'                                         01249001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

004FE4 42E0 DA43            00A43  7887=          STC   R14,CII+1              SET CII                      01250001
004FE8 89E0 0002            00002  7888=          SLL   R14,2                                               01251001
004FEC 47F0 C36C            04F8C  7889=          B     KEG1                                                01252001
                                   7890=*                                                                   01253001
004FF0 D300 C3E7 9008 05007 00008  7891=KEF31     MVZ   KEG3+1(1),8(R9)        PREPARE INSTRUCTION          01254001
004FF6 D100 C3E7 DA72 05007 00A72  7892=          MVN   KEG3+1(1),VPLACE                                    01255001
004FFC D201 C3E8 DA6A 05008 00A6A  7893=          MVC   KEG3+2(2),WPLACE                                    01256001
005002 4520 55A2            005EA  7894=          BAL   R2,GENTXT4             GENERATE 4 BYTES             01257001
005006 5800 0000            00000  7895=KEG3      L     0,0(0,0)               *** GENERATED CODE ***       01258001
00500A 47F0 C3AA            04FCA  7896=          B     KEH21                                               01259001
                                   7897=*                                                                   01260001
00500E 94FE DA49      00A49        7898=KEC2      NI    RIR+1,X'FE'                                         01261001
005012 4540 545E            004A6  7899=          BAL   R4,TRINRE                                           01262001
005016 47F0 C1EC            04E0C  7900=          B     KCE11                                               01263001
                                   7901=*                                                                   01264001
00501A 9110 9005      00005        7902=KBD21     TM    5(R9),APIMASK          BLO AN API ?                 01265001
00501E 4710 C0A6            04CC6  7903=          BO    KBD2+6                 YES, BRANCH                  01266001
005022 47F0 C0A0            04CC0  7904=          B     KBD2                                                01267001
                                   7905=*                                                                   01268001
                                   7906=*********************************************************************** 01269001
                                   7907=*                                                                   01270001
                                   7908=*         COMPILER PROGRAM - CP80                                   01271001
                                   7909=*                                                                   01272001
                                   7910=*********************************************************************** 01273001
                                   7911=*                                                                   01274001
                                   7912=*         BEGIN OF CONDITIONAL EXPRESSION                           01275001
                                   7913=*         CONTEXT             EXPRESSION                            01276001
                                   7914=*         SOURCE OPERATOR     'IF'                                  01277001
                                   7915=*         STACK OPERATOR      (                                     01278001
                                   7916=*         OPERANDS            NONE                                  01279001
                                   7917=*                                                                   01280001
                 R:C  05026        7918=          USING CP80,R12                                            01281001
005026 9101 D080      00080        7919=CP80      TM    COMPFLGS,OPERAND       OPERAND ON ?                 01282001
00502A 4780 C01E            05044  7920=          BZ    KIB2                   NO, BRANCH                   01283001
00502E 4540 5304            0034C  7921=          BAL   R4,SERR4               ERROR PATTERN ENTRY          01284001
005032 00A4                        7922=          DC    H'164'                 ERROR 164                    01285001
                                   7923=*                                                                   01286001
005034 4190 9005            00005  7924=          LA    R9,5(,R9)              CLOPD                        01287001
005038 4540 5E30            00E78  7925=KIF2      BAL   R4,MOVEOPTK            RESERVE OPERATOR STACK FNT   01288001
00503C D200 A000 8000 00000 00000  7926=          MVC   0(1,R10),0(R8)         INSERT SOURCE INTO STACK     01289001
005042 07F5                        7927=          BR    R5                     BRANCH TO SUBSTART           01290001
                                   7928=*                                                                   01291001
005044 9180 D080      00080        7929=KIB2      TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?          01292001
005048 4710 C012            05038  7930=          BO    KIF2                   YES, BRANCH                  01293001
00504C 4540 5706            0074E  7931=          BAL   R4,CLEARRG             CLEAR REGISTERS              01294001
005050 47F0 C012            05038  7932=          B     KIF2                   BRANCH                       01295001
                                   7933=*                                                                   01296001
                                   7934=*********************************************************************** 01297001
                                   7935=*                                                                   01298001
                                   7936=*         COMPILER PROGRAM - CP86                                   01299001
                                   7937=*                                                                   01300001
                                   7938=*********************************************************************** 01301001
                                   7939=*                                                                   01302001
                                   7940=*         ERRONEOUS CASE - WRONG CONDITIONAL EXPRESSION  OR STATEMENT    01303001
                                   7941=*         CONTEXT             EXPRESSION                            01304001
                                   7942=*         SOURCE OPERATOR     'ELSE'                                01305001
                                   7943=*         STACK OPERATOR      'IF','IFS'                            01306001
                                   7944=*         OPERANDS            NONE OR ONE                           01307001
                                   7945=*                                                                   01308001
                 R:C  05054        7946=          USING CP86,R12                                            01309001
005054 9101 D080      00080        7947=CP86      TM    COMPFLGS,OPERAND       OPERAND ON ?                 01310001
005058 4780 C022            05076  7948=          BZ    KUB2                   NO, BRANCH                   01311001
00505C 4540 5304            0034C  7949=          BAL   R4,SERR4               ERROR PATTERN ENTRY          01312001
005060 00A1                        7950=          DC    H'161'                 ERROR 161                    01313001
                                   7951=*                                                                   01314001
005062 951D A000      00000        7952=KUE1      CLI   0(R10),X'1D'           OPERATOR STACK 'IF' ?        01315001
005066 4770 C030            05084  7953=          BNE   KUE2                   NO, BRANCH                   01316001
00506A D200 A000 8000 00000 00000  7954=          MVC   0(1,R10),0(R8)         INSERT SOURCE INTO STACK     01317001
005070 4540 5D02            00D4A  7955=          BAL   R4,STACKAPI                                         01318001
005074 07F5                        7956=          BR    R5                     BRANCH TO SUBSTART           01319001
                                   7957=*                                                                   01320001
005076 4540 5304            0034C  7958=KUB2      BAL   R4,SERR4               ERROR PATTERN ENTRY          01321001
00507A 00A0                        7959=          DC    H'160'                 ERROR 160                    01322001
                                   7960=*                                                                   01323001
00507C 4B90 5170            001B8  7961=          SH    R9,KH5                 RESERVE OPERAND STACK ENT    01324001
005080 47F0 C00E            05062  7962=          B     KUE1                                                01325001
                                   7963=*                                                                   01326001
005084 4BB0 5180            001C8  7964=KUE2      SH    R11,KH614              CSW(PC)                      01327001
005088 9227 A000      00000        7965=          MVI   0(R10),X'27'           INSERT THENS INTO STACK      01328001
00508C 07F5                        7966=          BR    R5                     BRANCH TO SUBSTART           01329001
                                   7967=*                                                                   01330001
                                   7968=*********************************************************************** 01331001
                                   7969=*                                                                   01332001
                                   7970=*         COMPILER PROGRAM - CP87                                   01333001
                                   7971=*                                                                   01334001
                                   7972=*********************************************************************** 01335001
                                   7973=*                                                                   01336001
                                   7974=*         FIRST ALTERNATIVE IN CONDITIONAL  EXPRESSION              01337001
                                   7975=*         CONTEXT             EXPRESSION                            01338001
                                   7976=*         SOURCE OPERATOR     'ELSE'                                01339001
                                   7977=*         STACK OPERATOR      'THEN'                                01340001
                                   7978=*         OPERANDS            ONE OPERAND AND ONE LABEL             01341001
                                   7979=*                                                                   01342001
                 R:C  0508E        7980=          USING CP87,R12                                            01343001
00508E 4140 C0A6            05134  7981=CP87      LA    R4,KWJ3                LOAD RETURN ADDR             01344001
005092 4530 5F08            00F50  7982=          BAL   R3,OPDTEST             OPDT AND ERROR 162           01345001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

005096 4540 5E9A              00EE2  7983=           BAL   R4,ARRTEST1                                          01346001
00509A 9180 D080        00080        7984=           TM    COMPFLGS,COMPMODE      SYNTAX CHECK MODE ?           01347001
00509E 4710 C0A6              05134  7985=           BO    KWJ3                   YES, BRANCH                   01348001
0050A2 4540 578A              007D2  7986=           BAL   R4,OPDREC              CALL OPERAND RECOGNITION      01349001
0050A6 9103 9001        00001        7987=           TM    1(R9),X'03'            LO BOOLEAN ?                  01350001
0050AA 4710 C0B2              05140  7988=           BO    KWE1                   YES, BRANCH                   01351001
0050AE 4740 C17E              0520C  7989=           BM    KXB1                                                 01352001
0050B2 9108 9001        00001        7990=           TM    1(R9),X'08'            LO LABEL ?                    01353001
0050B6 4780 C096              05124  7991=           BZ    KYB2                                                 01354001
0050BA 9104 9001        00001        7992=           TM    1(R9),X'04'                                          01355001
0050BE 4710 C096              05124  7993=           BO    KYB2                                                 01356001
0050C2 9180 9003        00003        7994=           TM    3(R9),X'80'                                          01357001
0050C6 4710 C086              05114  7995=           BO    KWG13                                                01358001
0050CA 9101 DA46        00A46        7996=           TM    RII,X'01'              ADR OCCUPIED ?                01359001
0050CE 4780 C048              050D6  7997=           BZ    KYF1                   NO, BRANCH                    01360001
0050D2 4540 5B46              00B8E  7998=           BAL   R4,ROUTIN10            STADR                         01361001
0050D6 D201 C090 9003 0511E 00003    7999=KYF1       MVC   KYF11+2(2),3(R9)       PREPARE INSTRUCTION           01362001
0050DC 1BFF                          8000=           SR    R15,R15                PREPARE INSTRUCTION           01363001
0050DE 43F0 9002              00002  8001=           IC    R15,2(,R9)                                           01364001
0050E2 89F0 0003              00003  8002=           SLL   R15,3                                                01365001
0050E6 40F0 D5F8              005F8  8003=           STH   R15,WORKPL                                           01366001
0050EA D201 C094 D5F8 05122 005F8    8004=           MVC   KYF12+2(2),WORKPL                                    01367001
0050F0 4120 C08E              0511C  8005=           LA    R2,KYF11                                             01368001
0050F4 45E0 5588              005D0  8006=           BAL   R14,GENTXTS                                          01369001
0050F8 0008                          8007=           DC    H'8'                   GENERATE 8 BYTES              01370001
                                     8008=*                                                                     01371001
0050FA 4A70 DA56              00A56  8009=           AH    R7,ONEENTRY                                          01372001
0050FE 4070 D5F8              005F8  8010=           STH   R7,WORKPL                                            01373001
005102 D201 9003 D5F8 00003 005F8    8011=           MVC   3(2,R9),WORKPL                                       01374001
005108 9680 9003        00003        8012=           OI    3(R9),X'80'                                          01375001
00510C 940F 9000        00000        8013=           NI    0(R9),X'0F'                                          01376001
005110 96A0 9000        00000        8014=           OI    0(R9),X'A0'                                          01377001
005114 9200 DA46        00A46        8015=KWG13      MVI   RII,X'00'                                            01378001
005118 47F0 C0C2              05150  8016=           B     KWG12                                                01379001
                                     8017=*                                                                     01380001
00511C 588C 0000              00000  8018=KYF11      L     ADR,0(LAT,0)           *** GENERATED CODE ***        01381001
005120 589B 0000              00000  8019=KYF12      L     GDSA,0(PBT,0)          *** GENERATED CODE ***        01382001
                                     8020=*                                                                     01383001
005124 4540 5380              003C8  8021=KYB2       BAL   R4,SERR1                                             01384001
005128 00B2                          8022=           DC    H'178'                 ERROR 178                     01385001
                                     8023=*                                                                     01386001
00512A D204 9000 5182 00000 001CA    8024=           MVC   0(5,R9),API                                          01387001
005130 47F0 C0A6              05134  8025=           B     KWJ3                                                 01388001
                                     8026=*                                                                     01389001
005134 D200 A000 8000 00000 00000    8027=KWJ3       MVC   0(1,R10),0(R8)         C(R10)=C(R8)                  01390001
00513A 92FF DA61        00A61        8028=           MVI   GPBN+1,X'FF'                                         01391001
00513E 07F5                          8029=           BR    R5                     RETURN TO SUBSTART            01392001
                                     8030=*                                                                     01393001
005140 9120 9000        00000        8031=KWE1       TM    0(R9),X'20'            LO A VALUE ?                  01394001
005144 4710 C172              05200  8032=           BO    KWE3                   NO, BRANCH                    01395001
005148 9180 9000        00000        8033=           TM    0(R9),X'80'            LO IN OBJECT STACK ?          01396001
00514C 4710 C0F6              05184  8034=           BO    KWF2                   NO, BRANCH                    01397001
005150 4B70 DA56              00A56  8035=KWG12      SH    R7,ONEENTRY                                          01398001
005154 4540 5E70              00EB8  8036=KWG1       BAL   R4,LATRES                                            01399001
005158 D201 C0D6 D0A2 05164 000A2    8037=           MVC   KWH1+2(2),LN           PREPARE INSTRUCTION           01400001
00515E 4520 55A6              005EE  8038=           BAL   R2,GENTXT6             GENERATE 6 BYTES              01401001
005162 58FC 0000              00000  8039=KWH1       L     BRR,0(LAT,0)           *** GENERATED CODE ***        01402001
005166 07FF                          8040=           BR    BRR                    *** GENERATED CODE ***        01403001
005168 D201 D5F8 9008 005F8 00008    8041=           MVC   WORKPL(2),8(R9)        TRANSFER PRPOINT TO LAT ENTRY 01404001
00516E 48F0 D5F8              005F8  8042=           LH    R15,WORKPL             INDICATED BY R9+8             01405001
005172 58E0 D61C              0061C  8043=           L     R14,LATAB                                            01406001
005176 506F E000              00000  8044=           ST    R6,0(R15,R14)                                        01407001
00517A D201 9008 D0A2 00008 000A2    8045=           MVC   8(2,R9),LN             TRANSFER LNR TO R9+5 ENTRY    01408001
005180 47F0 C0A6              05134  8046=           B     KWJ3                                                 01409001
                                     8047=*                                                                     01410001
005184 91FF 9002        00002        8048=KWF2       TM    2(R9),X'FF'            LO A CONSTANT?                01411001
005188 4780 C142              051D0  8049=           BZ    KWF21                  YES, BRANCH                   01412001
00518C 4540 593C              00984  8050=           BAL   R4,ROUTINE1            CALL ROUTINE NUMBER 1         01413001
005190 4A70 DA56              00A56  8051=KWG2       AH    R7,ONEENTRY            INCREASE P                    01414001
005194 4070 D5F8              005F8  8052=           STH   R7,WORKPL                                            01415001
005198 4540 58BA              00902  8053=           BAL   R4,MAXCH               CHECK MAXIMUM                 01416001
00519C D201 C12A D5F8 051B8 005F8    8054=           MVC   KWH2+2(2),WORKPL       PREPARE INSTRUCTION           01417001
0051A2 96A0 C12A        051B8        8055=           OI    KWH2+2,X'A0'                                         01418001
0051A6 D201 C12C DA6A 051BA 00A6A    8056=           MVC   KWH2+4(2),WPLACE                                     01419001
0051AC D300 C12C DA72 051BA 00A72    8057=           MVZ   KWH2+4(1),VPLACE                                     01420001
0051B2 4520 55A6              005EE  8058=           BAL   R2,GENTXT6             GENERATE 6 BYTES              01421001
0051B6 D200 A000 0000 00000 00000    8059=KWH2       MVC   0(1,CDSA),0(0)         *** GENERATED CODE ***        01422001
0051BC D201 9003 D5F8 00003 005F8    8060=KWF23      MVC   3(2,R9),WORKPL         ADJUST R9 ENTRY               01423001
0051C2 945F 9000        00000        8061=           NI    0(R9),X'5F'                                          01424001
0051C6 D200 9002 DA5D 00002 00A5D    8062=           MVC   2(1,R9),SPBNST+1                                     01425001
0051CC 47F0 C0C2              05150  8063=           B     KWG12                                                01426001
                                     8064=*                                                                     01427001
0051D0 4A70 DA56              00A56  8065=KWF21      AH    R7,ONEENTRY            INCREASE P                    01428001
0051D4 4070 D5F8              005F8  8066=           STH   R7,WORKPL                                            01429001
0051D8 4540 58BA              00902  8067=           BAL   R4,MAXCH               CHECK MAX                     01430001
0051DC 9401 9004        00004        8068=           NI    4(R9),X'01'                                          01431001
0051E0 D201 C168 D5F8 051F6 005F8    8069=           MVC   KWF22+2(2),WORKPL      PREPARE INSTRUCTION           01432001
0051E6 96A0 C168        051F6        8070=           OI    KWF22+2,X'A0'                                        01433001
0051EA D200 C167 9004 051F5 00004    8071=           MVC   KWF22+1(1),4(R9)                                     01434001
0051F0 4520 55A2              005EA  8072=           BAL   R2,GENTXT4             GENERATE 4 BYTES              01435001
0051F4 9200 A000        00000        8073=KWF22      MVI   0(CDSA),X'00'          *** GENERATED CODE ***        01436001
0051F8 9630 9001        00001        8074=           OI    1(R9),X'30'            ADJUST R9 ENTRY               01437001
0051FC 47F0 C12E              051BC  8075=           B     KWF23                                                01438001
                                     8076=*                                                                     01439001
005200 4540 59F2              00A3A  8077=KWE3       BAL   R4,ROUTINE3            CALL ROUTINE NUMBER 3         01440001
005204 9760 9000        00000        8078=           XI    0(R9),X'60'                                          01441001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

005208 47F0 C102            05190  8079=         B     KWG2                                                    01442001
                                   8080=*                                                                      01443001
00520C 9102 9001      00001        8081=KXB1     TM    1(R9),X'02'             LO REAL ?                       01444001
005210 4780 C1D0            0525E  8082=         BZ    KXB3                    INTEGER, BRANCH                 01445001
005214 9120 9000      00000        8083=         TM    0(R9),X'20'             LO A VALUE ?                    01446001
005218 4710 C1A2            05230  8084=         BO    KXC2                    NO, BRANCH                      01447001
00521C 9140 9000      00000        8085=         TM    0(R9),X'40'             LO IN A FPR ?                   01448001
005220 4780 C1BA            05248  8086=         BZ    KXH22                                                   01449001
005224 9180 9000      00000        8087=         TM    0(R9),X'80'             LO IN A FPR BEFORE ?            01450001
005228 4710 C1A2            05230  8088=         BO    KXC2                    NO, BRANCH                      01451001
00522C 4B70 DA56            00A56  8089=         SH    R7,ONEENTRY             REDUCE O                        01452001
005230 4540 5BBE            00C06  8090=KXC2     BAL   R4,ROUTIN11             BRANCH TO ROUTINE 11            01453001
005234 4B90 5170            001B8  8091=         SH    R9,KH5                  REDUCE R9                       01454001
005238 9120 9005      00005        8092=         TM    5(R9),X'20'             LO A VALUE ?                    01455001
00523C 4780 C1C8            05256  8093=         BZ    KXG2                    YES, BRANCH                     01456001
005240 4540 5996            009DE  8094=         BAL   R4,ROUTINE2             LOAD LO INTO A FPR              01457001
005244 4190 9005            00005  8095=KXH2     LA    R9,5(,R9)               INCREACE R9                     01458001
005248 4540 5C08            00C50  8096=KXH22    BAL   R4,ROUTIN12             CALL ROUTINE NUMBER 12          01459001
00524C D200 9005 9003 00005 00003  8097=KWG11    MVC   5(1,R9),3(R9)                                           01460001
005252 47F0 C0C6            05154  8098=         B     KWG1                                                    01461001
                                   8099=*                                                                      01462001
005256 4540 5A50            00A98  8100=KXG2     BAL   R4,ROUTINE4             LOAD FOR                        01463001
00525A 47F0 C1B6            05244  8101=         B     KXH2                                                    01464001
                                   8102=*                                                                      01465001
00525E 9120 9000      00000        8103=KXB3     TM    0(R9),X'20'             LO A VALUE ?                    01466001
005262 4710 C1EC            0527A  8104=         BO    KXC4                    NO, BRANCH                      01467001
005266 9140 9000      00000        8105=         TM    0(R9),X'40'             LO IN A GPR ?                   01468001
00526A 4780 C204            05292  8106=         BZ    KXH21                                                   01469001
00526E 9180 9000      00000        8107=         TM    0(R9),X'80'             LO IN A GPR ?                   01470001
005272 4710 C1EC            0527A  8108=         BO    KXC4                    NO, BRANCH                      01471001
005276 4B70 DA56            00A56  8109=         SH    R7,ONEENTRY             REDUCE P                        01472001
00527A 4540 5AB0            00AF8  8110=KXC4     BAL   R4,ROUTINE7             BRANCH TO ROUTINE 11            01473001
00527E 4B90 5170            001B8  8111=         SH    R9,KH5                  REDUCE R9                       01474001
005282 9120 9005      00005        8112=         TM    5(R9),X'20'             LO A VALUE ?                    01475001
005286 4780 C20C            0529A  8113=         BZ    KXG4                    YES, BRANCH                     01476001
00528A 4540 5AA0            00AE8  8114=         BAL   R4,ROUTINE6             LOAD LO INTO GPR                01477001
00528E 4190 9005            00005  8115=KXH23    LA    R9,5(,R9)                                               01478001
005292 4540 5AF2            00B3A  8116=KXH21    BAL   R4,ROUTINE8                                             01479001
005296 47F0 C1BE            0524C  8117=         B     KWG11                                                   01480001
                                   8118=*                                                                      01481001
00529A 4540 5A64            00AAC  8119=KXG4     BAL   R4,ROUTINE5             LOAD LO IN GPR                  01482001
00529E 47F0 C200            0528E  8120=         B     KXH23                                                   01483001
                                   8121=*                                                                      01484001
                                   8122=*********************************************************************** 01485001
                                   8123=*                                                                      01486001
                                   8124=*        END OF IEX50005                                               01487001
                                   8125=*                                                                      01488001
                                   8126=*********************************************************************** 01489001
                                   8127=*                                                                      01490001
                                   8128          COPY  IEX50006                IEX50006                        01936001
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  Active USINGs: IEX50000+X'508E',R12  IEX50000+X'48',R5  WORKAREA,R13

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   8130=*                                                                     00002001
                                   8131=*********************************************************************** 00003001
                                   8132=*                                                                     00004001
                                   8133=*        COMPILER PROGRAM - CP69                                      00005001
                                   8134=*                                                                     00006001
                                   8135=*********************************************************************** 00007001
                                   8136=*                                                                     00008001
                                   8137=*        ARITHMETIC AND RELATIONAL OPERATIONS                         00009001
                                   8138=*        CONTEXT             EXPRESSION                               00010001
                                   8139=*        SOURCE OPERATOR     SEE EXPRESSION CONTEXT  MATRIX           00011001
                                   8140=*        STACK OPERATOR      SEE EXPRESSION CONTEXT  MATRIX           00012001
                                   8141=*        OPERANDS            TWO OPERANDS                             00013001
                                   8142=*                                                                     00014001
                 R:C  052A2        8143=         USING CP69,R12                                               00015001
0052A2 9101 D080      00080        8144=CP69     TM    COMPFLGS,OPERAND        OPERAND ON ?                   00016001
0052A6 4780 C478            0571A  8145=         BZ    GNB2                    NO, BRANCH                     00017001
0052AA 4540 5EE4            00F2C  8146=         BAL   R4,ARRTEST2                                            00018001
0052AE 9103 9001      00001        8147=         TM    1(R9),X'03'             LO ARITHMETIC ?                00019001
0052B2 47B0 C48C            0572E  8148=         BNM   GND2                    NO, BRANCH                     00020001
0052B6 9103 9006      00006        8149=         TM    6(R9),X'03'             BLO ARITHMETIC ?               00021001
0052BA 47B0 C4A6            05748  8150=         BNM   GND22                   NO, BRANCH                     00022001
0052BE 91C0 D080      00080        8151=         TM    COMPFLGS,COMPMODE+SUBSCOPT  SYNTAX + SUBSCRIPT OPT ?   00023001
0052C2 4770 C4BE            05760  8152=         BNZ   GOE11                   NO, BRANCH                     00024001
0052C6 4540 578A            007D2  8153=         BAL   R4,OPDREC               OPERAND RECOGNIZER LO          00025001
0052CA 4190 9005            00005  8154=         LA    R9,5(,R9)               INCREASE R9                    00026001
0052CE 4540 578A            007D2  8155=         BAL   R4,OPDREC               OPERAND RECOGNIZER BLO         00027001
0052D2 4B90 5170            001B8  8156=         SH    R9,KH5                  DECREASE R9                    00028001
0052D6 9102 9001      00001        8157=         TM    1(R9),X'02'             LO REAL ?                      00029001
0052DA 4780 C5D8            0587A  8158=         BZ    GOB3                    INTEGER, BRANCH                00030001
0052DE 9102 9006      00006        8159=         TM    6(R9),X'02'             BLO REAL ?                     00031001
0052E2 4780 CC7C            05F1E  8160=         BZ    HQB1                    INTEGER, BRANCH                00032001
0052E6 9505 A000      00000        8161=HEB1     CLI   0(R10),XFPOWER          OPT POWER ?                    00033001
0052EA 4780 CE32            060D4  8162=         BE    HOB1                    YES, BRANCH                    00034001
0052EE 9120 9005      00005        8163=DHEB2    TM    5(R9),X'20'             BLO A VALUE ?                  00035001
0052F2 4710 C0A0            05342  8164=         BO    HFB1                    NO, BRANCH                     00036001
0052F6 9140 9005      00005        8165=         TM    5(R9),X'40'             BLO IN A FPR ?                 00037001
0052FA 4710 C094            05336  8166=         BO    HEC3                    NO, BRANCH                     00038001
0052FE D300 DA70 9008 00A70 00008  8167=HEE31    MVZ   UPLACE(1),8(R9)         U=R(BLO)                       00039001
005304 4190 9005            00005  8168=         LA    R9,5(,R9)                                              00040001
005308 4540 C0F8            0539A  8169=         BAL   R4,CLFPR                                               00041001
00530C 4B90 5170            001B8  8170=         SH    R9,KH5                                                 00042001
005310 9510 A000      00000        8171=         CLI   0(R10),X'10'                                           00043001
005314 4740 C07A            0531C  8172=         BL    HEF2                                                   00044001
005318 4B70 DA56            00A56  8173=         SH    R7,ONEENTRY                                            00045001
00531C 4140 C51C            057BE  8174=HEF2     LA    R4,HLD1                                                00046001
005320 4530 5CB4            00CFC  8175=         BAL   R3,ROUTIN15             CALL ROUTINE NUMBER 15         00047001
005324 D100 DA70 DA72 00A70 00A72  8176=         MVN   UPLACE(1),VPLACE                                       00048001
00532A 4540 C0F8            0539A  8177=         BAL   R4,CLFPR                                               00049001
00532E 4540 5C08            00C50  8178=         BAL   R4,ROUTIN12             CALL ROUTINE NUMBER 12         00050001
005332 47F0 C32C            055CE  8179=         B     HKD1                                                   00051001
                                   8180=*                                                                     00052001
005336 9180 9005      00005        8181=HEC3     TM    5(R9),X'80'             BLO IN A REGISTER ?            00053001
00533A 4710 C0A0            05342  8182=         BO    HFB1                                                   00054001
00533E 4B70 DA56            00A56  8183=         SH    R7,ONEENTRY             REDUCE P                       00055001
005342 9120 9000      00000        8184=HFB1     TM    0(R9),X'20'             LO A VALUE ?                   00056001
005346 4710 C1B6            05458  8185=         BO    HGD1                    AN ADDR, BRANCH                00057001
00534A 9140 9000      00000        8186=         TM    0(R9),X'40'             LO IN A FPR ?                  00058001
00534E 4710 C1AA            0544C  8187=         BO    HGB1                    NO, BRANCH                     00059001
005352 9503 A000      00000        8188=         CLI   0(R10),XFSLASH          OPT / ?                        00060001
005356 4770 C14E            053F0  8189=         BNE   HFD2                    NO, BRANCH                     00061001
00535A 910F DA49      00A49        8190=         TM    RIR+1,X'0F'                                            00062001
00535E 4710 C120            053C2  8191=         BO    HFB11                                                  00063001
005362 4540 5BBE            00C06  8192=         BAL   R4,ROUTIN11             CALL ROUTINE NUMBER 11         00064001
005366 4B70 DA56            00A56  8193=         SH    R7,ONEENTRY                                            00065001
00536A 4540 C0F8            0539A  8194=         BAL   R4,CLFPR                                               00066001
00536E 8930 0001            00001  8195=         SLL   R3,1                                                   00067001
005372 89E0 0004            00004  8196=         SLL   R14,4                                                  00068001
005376 163E                        8197=         OR    R3,R14                                                 00069001
005378 88E0 0004            00004  8198=         SRL   R14,4                                                  00070001
00537C 4230 C0F3            05395  8199=         STC   R3,HFB12+1                                             00071001
005380 4230 DA70            00A70  8200=         STC   R3,UPLACE                                              00072001
005384 9120 9005      00005        8201=         TM    5(R9),X'20'                                            00073001
005388 4710 C118            053BA  8202=         BO    HFB13                                                  00074001
00538C 4540 5A50            00A98  8203=         BAL   R4,ROUTINE4             CALL ROUTINE NUMBER 4          00075001
005390 4520 5598            005E0  8204=HFB14    BAL   R2,GENTXTP2             GENERATE 2 BYTES               00076001
005394 2D00                        8205=HFB12    DDR   0,0                     *** GENERATED CODE ***         00077001
005396 47F0 C4E6            05788  8206=         B     GOE2                                                   00078001
                                   8207=*                                                                     00079001
00539A 1B33                        8208=CLFPR    SR    R3,R3                                                  00080001
00539C 4339 0003            00003  8209=         IC    R3,3(R9)                                               00081001
0053A0 8830 0005            00005  8210=         SRL   R3,5                                                   00082001
0053A4 41F0 0001            00001  8211=         LA    R15,1                                                  00083001
0053A8 89F0 3000            00000  8212=         SLL   R15,0(R3)                                              00084001
0053AC 42F0 C113            053B5  8213=         STC   R15,HEE3+1                                             00085001
0053B0 97FF C113      053B5        8214=         XI    HEE3+1,X'FF'                                           00086001
0053B4 9400 DA49      00A49        8215=HEE3     NI    RIR+1,X'00'                                            00087001
0053B8 07F4                        8216=         BR    R4                                                     00088001
                                   8217=*                                                                     00089001
0053BA 4540 5996            009DE  8218=HFB13    BAL   R4,ROUTINE2             CALL ROUTINE NUMBER 2          00090001
0053BE 47F0 C0EE            05390  8219=         B     HFB14                                                  00091001
                                   8220=*                                                                     00092001
0053C2 1BEE                        8221=HFB11    SR    R14,R14                 STORE LO                       00093001
0053C4 43E9 0003            00003  8222=         IC    R14,3(R9)                                              00094001
0053C8 42E0 DA70            00A70  8223=         STC   R14,UPLACE              U=R(BLO)                       00095001
0053CC 88E0 0004            00004  8224=         SRL   R14,4                                                  00096001
0053D0 4540 5C66            00CAE  8225=         BAL   R4,ROUTIN13             CALL ROUTINE NUMBER 13         00097001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

0053D4 9120 9005        00005       8226=             TM    5(R9),X'20'             BLO A VALUE ?                 00098001
0053D8 4710 C146              053E8 8227=             BO    HFF2                    AN ADDR, BRANCH               00099001
0053DC 4540 5A50              00A98 8228=             BAL   R4,ROUTINE4             CALL ROUTINE NUMBER 4         00100001
0053E0 4540 593C              00984 8229=HFG2         BAL   R4,ROUTINE1             CALL ROUTINE NUMBER 1         00101001
0053E4 47F0 C51C              057BE 8230=             B     HLD1                                                  00102001
                                    8231=*                                                                        00103001
0053E8 4540 5996              009DE 8232=HFF2         BAL   R4,ROUTINE2             CALL ROUTINE NUMBER 2         00104001
0053EC 47F0 C13E              053E0 8233=             B     HFG2                                                  00105001
                                    8234=*                                                                        00106001
0053F0 D300 DA70 9003 00A70 00003   8235=HFD2         MVZ   UPLACE(1),3(R9)         V=R(LO)                       00107001
0053F6 9516 A000        00000       8236=             CLI   0(R10),XFASSIGN         OPT .= ?                      00108001
0053FA 4770 C170              05412 8237=             BNE   HFD3                    NO, BRANCH                    00109001
0053FE 4540 5C08              00C50 8238=             BAL   R4,ROUTIN12             CALL ROUTINE NUMBER 12        00110001
005402 4190 9005              00005 8239=             LA    R9,5(,R9)               INCREASE R9                   00111001
005406 4540 5CB4              00CFC 8240=             BAL   R4,ROUTIN15             CALL ROUTINE NUMBER 15        00112001
00540A 4B90 5170              001B8 8241=HFC51        SH    R9,KH5                  DECREASE R9                   00113001
00540E 47F0 C51C              057BE 8242=             B     HLD1                                                  00114001
                                    8243=*                                                                        00115001
005412 D204 D5F6 9000 005F6 00000   8244=HFD3         MVC   KONSUM(5),0(R9)                                       00116001
005418 D204 9000 9005 00000 00005   8245=             MVC   0(5,R9),5(R9)                                         00117001
00541E D204 9005 D5F6 00005 005F6   8246=             MVC   5(5,R9),KONSUM                                        00118001
005424 9110 A000        00000       8247=             TM    0(R10),X'10'            OPT ARITHMETIC ?              00119001
005428 4710 C1A2              05444 8248=             BO    HFE4                    RELATIONAL, BRANCH            00120001
00542C 92FF 518E        001D6       8249=HFH3         MVI   SWREL,X'FF'             SWREL=FF                      00121001
005430 9120 9000        00000       8250=HGG11        TM    0(R9),X'20'             LO A VALUE ?                  00122001
005434 4140 C51C              057BE 8251=             LA    R4,HLD1                                               00123001
005438 4710 C19E              05440 8252=             BO    HFJ3                    AN ADDR, BRANCH               00124001
00543C 47F0 593C              00984 8253=             B     ROUTINE1                                              00125001
                                    8254=*                                                                        00126001
005440 47F0 59F2              00A3A 8255=HFJ3         B     ROUTINE3                                              00127001
                                    8256=*                                                                        00128001
005444 4540 5C08              00C50 8257=HFE4         BAL   R4,ROUTIN12             CALL ROUTINE NUMBER 12        00129001
005448 47F0 C18A              0542C 8258=             B     HFH3                                                  00130001
                                    8259=*                                                                        00131001
00544C 9180 9000        00000       8260=HGB1         TM    0(R9),X'80'             LO IN A REGISTER ?            00132001
005450 4710 C1B6              05458 8261=             BO    HGD1                    NO, BRANCH                    00133001
005454 4B70 DA56              00A56 8262=             SH    R7,ONEENTRY                                           00134001
005458 9516 A000        00000       8263=HGD1         CLI   0(R10),XFASSIGN         OPT .= ?                      00135001
00545C 4780 C1EE              05490 8264=             BE    HGD2                    YES, BRANCH                   00136001
005460 4540 5BBE              00C06 8265=             BAL   R4,ROUTIN11             CALL ROUTINE NUMBER 11        00137001
005464 9120 9005        00005       8266=             TM    5(R9),X'20'             IS BLO A VALUE                00138001
005468 4780 C1E6              05488 8267=             BZ    HGG1                    YES, BRANCH                   00139001
00546C 4540 5996              009DE 8268=             BAL   R4,ROUTINE2             CALL ROUTINE NUMBER 2         00140001
005470 89E0 0004              00004 8269=HGH1         SLL   R14,4                   1=R(BLO)                      00141001
005474 42E0 DA70              00A70 8270=             STC   R14,UPLACE                                            00142001
005478 9510 A000        00000       8271=             CLI   0(R10),X'10'            OPT ARITHMETIC ?              00143001
00547C 4740 C18E              05430 8272=             BL    HGG11                   YES, BRANCH                   00144001
005480 4540 5C08              00C50 8273=             BAL   R4,ROUTIN12             CALL ROUTINE NUMBER 12        00145001
005484 47F0 C18E              05430 8274=             B     HGG11                                                 00146001
                                    8275=*                                                                        00147001
005488 4540 5A50              00A98 8276=HGG1         BAL   R4,ROUTINE4             ROUTINE NR.4                  00148001
00548C 47F0 C1CE              05470 8277=             B     HGH1                                                  00149001
                                    8278=*                                                                        00150001
005490 9120 9005        00005       8279=HGD2         TM    5(R9),X'20'             BLO A VALUE ?                 00151001
005494 4710 C2A8              0554A 8280=             BO    HJB1                    AN ADDR, BRANCH               00152001
005498 9120 9000        00000       8281=             TM    0(R9),X'20'             LO A VALUE ?                  00153001
00549C 4710 C27C              0551E 8282=             BO    HGB2                    AN ADDR, BRANCH               00154001
0054A0 4540 593C              00984 8283=             BAL   R4,ROUTINE1             CALL ROUTINE NUMBER 1         00155001
0054A4 D201 C300 9008 055A2 00008   8284=             MVC   HJH11+2(2),8(R9)        PREPARE INSTRUCTION           00156001
0054AA D500 DA5D 9007 00A5D 00007   8285=             CLC   SPBNST+1(1),7(R9)       DSA OF BLO CDSA  ?            00157001
0054B0 4770 C21A              054BC 8286=             BNE   HGB4                    NO, BRANCH                    00158001
0054B4 96A0 C300        055A2       8287=             OI    HJH11+2,X'A0'           PREPARE INSTRUCTION           00159001
0054B8 47F0 C2CC              0556E 8288=             B     HJH1                                                  00160001
                                    8289=*                                                                        00161001
0054BC 95FF DA61        00A61       8290=HGB4         CLI   GPBN+1,X'FF'            GDSA DESTROYED ?              00162001
0054C0 4780 C234              054D6 8291=             BE    HGB41                   YES, BRANCH                   00163001
0054C4 D500 DA60 9007 00A60 00007   8292=             CLC   GPBN(1),7(R9)           DSA OF BLO IN GPBN ?          00164001
0054CA 4770 C238              054DA 8293=             BNE   HGB5                    NO, BRANCH                    00165001
0054CE 9690 C300        055A2       8294=HGC4         OI    HJH11+2,X'90'           PREPARE INSTRUCTION           00166001
0054D2 47F0 C2CC              0556E 8295=             B     HJH1                                                  00167001
                                    8296=*                                                                        00168001
0054D6 9200 DA61        00A61       8297=HGB41        MVI   GPBN+1,0                SFT TO ZERO                   00169001
0054DA 1B11                         8298=HGB5         SR    R1,R1                   PREPARE INSTRUCTION           00170001
0054DC 4319 0007              00007 8299=             IC    R1,7(R9)                                              00171001
0054E0 8910 0003              00003 8300=             SLL   R1,3                                                  00172001
0054E4 4010 D5F8              005F8 8301=             STH   R1,WORKPL                                             00173001
0054E8 9599 DA72        00A72       8302=             CLI   VPLACE,X'99'            DSA OF LO IN GDSA ?           00174001
0054EC 4780 C266              05508 8303=             BE    HGE5                    YES, BRANCH                   00175001
0054F0 D201 C25A D5F8 054FC 005F8   8304=             MVC   HGA5+2(2),WORKPL                                      00176001
0054F6 4520 55A2              005EA 8305=             BAL   R2,GENTXT4              GENERATE 4 BYTES              00177001
0054FA 589B 0000              00000 8306=HGA5         L     GDSA,0(PBT,0)           *** GENERATED CODE ***        00178001
0054FE D200 DA60 9007 00A60 00007   8307=             MVC   GPBN(1),7(R9)           STORE NEW GDSA                00179001
005504 47F0 C22C              054CE 8308=             B     HGC4                                                  00180001
                                    8309=*                                                                        00181001
005508 D201 C272 D5F8 05514 005F8   8310=HGE5         MVC   HGF5+2(2),WORKPL                                      00182001
00550E 4520 55A2              005EA 8311=             BAL   R2,GENTXT4              GENERATE 4 BYTES              00183001
005512 58EB 0000              00000 8312=HGF5         L     R14,0(PBT,0)            *** GENERATED CODE ***        00184001
005516 96E0 C300        055A2       8313=             OI    HJH11+2,X'E0'           PREPARE INSTRUCTION           00185001
00551A 47F0 C2CC              0556E 8314=             B     HJH1                                                  00186001
                                    8315=*                                                                        00187001
00551E 4540 59F2              00A3A 8316=HGB2         BAL   R4,ROUTINE3             CALL ROUTINE NUMBER 3         00188001
005522 D201 C302 DA6A 055A4 00A6A   8317=             MVC   HJH11+4(2),WPLACE                                     00189001
005528 D300 C302 DA72 055A4 00A72   8318=             MVZ   HJH11+4(1),VPLACE                                     00190001
00552E 4190 9005              00005 8319=             LA    R9,5(0,R9)              INCREASE R9                   00191001
005532 4540 593C              00984 8320=             BAL   R4,ROUTINE1             CALL ROUTINE NUMBER 1         00192001
005536 4B90 5170              001B8 8321=             SH    R9,KH5                  DECREASE R9                   00193001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                   X390 3.1.04  2012/08/17 13.13

00553A D201 C300 DA6A 055A2 00A6A  8322=          MVC   HJH11+2(2),WPLACE                                      00194001
005540 D300 C300 DA72 055A2 00A72  8323=          MVZ   HJH11+2(1),VPLACE                                      00195001
005546 47F0 C2D8            0557A  8324=          B     HJH111                                                 00196001
                                   8325=*                                                                      00197001
00554A 4190 9005            00005  8326=HJB1      LA    R9,5(0,R9)                  INCREASE R9                00198001
00554E 4540 59F2            00A3A  8327=          BAL   R4,ROUTINE3                 CALL ROUTINE NUMBER 3      00199001
005552 D201 C300 DA6A 055A2 00A6A  8328=          MVC   HJH11+2(2),WPLACE                                      00200001
005558 D300 C300 DA72 055A2 00A72  8329=          MVZ   HJH11+2(1),VPLACE                                      00201001
00555E 4B90 5170            001B8  8330=          SH    R9,KH5                      DECREASE R9                00202001
005562 9120 9000      00000        8331=          TM    0(R9),X'20'                 LO A VALUE ?               00203001
005566 4710 C316            055B8  8332=          BO    HJC1                        AN ADDR, BRANCH            00204001
00556A 4540 593C            00984  8333=          BAL   R4,ROUTINE1                 CALL ROUTINE NUMBER 1      00205001
00556E D201 C302 DA6A 055A4 00A6A  8334=HJH1      MVC   HJH11+4(2),WPLACE                                      00206001
005574 D300 C302 DA72 055A4 00A72  8335=          MVZ   HJH11+4(1),VPLACE                                      00207001
00557A 9200 C2FF      055A1        8336=HJH111    MVI   HJH11+1,0                                              00208001
00557E 9103 9001      00001        8337=          TM    1(R9),X'03'                                            00209001
005582 4710 C2FA            0559C  8338=          BO    HJH13                                                  00210001
005586 9203 C2FF      055A1        8339=          MVI   HJH11+1,X'03'                                          00211001
00558A 9101 9001      00001        8340=          TM    1(R9),X'01'                                            00212001
00558E 4710 C2FA            0559C  8341=          BO    HJH13                                                  00213001
005592 48E0 DA56            00A56  8342=          LH    R14,ONEENTRY                                           00214001
005596 06E0                        8343=          BCTR  R14,0                                                  00215001
005598 42E0 C2FF            055A1  8344=          STC   R14,HJH11+1                                            00216001
00559C 4520 55A6            005EE  8345=HJH13     BAL   R2,GENTXT6                  GENERATE 6 BYTES           00217001
0055A0 D207 0000 0000 00000 00000  8346=HJH11     MVC   0(8,0),0(0)                 *** GENERATED CODE ***     00218001
0055A6 5810 C312            055B4  8347=HLE21     L     R1,ABIG2                    R1 -> ABIG2 ENTRY IN CP20  00219001
0055AA 9200 518E      001D6        8348=          MVI   SWREL,X'00'                                            00220001
0055AE 58C0 51F4            0023C  8349=          L     R12,SCPTAB+4*20             R12 -> CP20 FOR ADDRESSABILITY 00221001
0055B2 07F1                        8350=          BR    R1                          BRANCH TO CP20             00222001
                                   8351=*                                                                      00223001
0055B4 000033EC                    8352=ABIG2     DC    A(BIG2)                                                00224001
                                   8353=*                                                                      00225001
0055B8 D201 C322 9003 055C4 00003  8354=HJC1      MVC   HJC11+2(2),3(R9)                                       00226001
0055BE 4520 55A2            005EA  8355=          BAL   R2,GENTXT4                  GENERATE 4 BYTES           00227001
0055C2 58EA 0000            00000  8356=HJC11     L     R14,0(CDSA,0)               *** GENERATED CODE ***     00228001
0055C6 92E0 DA72      00A72        8357=          MVI   VPLACE,X'E0'                                           00229001
0055CA 47F0 C2CC            0556E  8358=          B     HJH1                                                   00230001
                                   8359=*                                                                      00231001
0055CE D200 C38D DA70 0562F 00A70  8360=HKD1      MVC   HKH4+1(1),UPLACE                                       00232001
0055D4 922A C38C      0562E        8361=          MVI   HKH4,X'2A'                                             00233001
0055D8 9501 A000      00000        8362=          CLI   0(R10),XFMINUS              OPT MINUS ?                00234001
0055DC 4740 C388            0562A  8363=          BL    HKH41                       OPT PLUS, BRANCH           00235001
0055E0 4780 C41C            056BE  8364=          BE    HKF2                        OPT MINUS, BRANCH          00236001
0055E4 922C C38C      0562E        8365=          MVI   HKH4,X'2C'                                             00237001
0055E8 9503 A000      00000        8366=          CLI   0(R10),XFSLASH              OPT REAL DIVISION ?        00238001
0055EC 4740 C388            0562A  8367=          BL    HKH41                       OPT MULTIPLICATION, BRANCH 00239001
0055F0 4780 C414            056B6  8368=          BE    HKD2                        OPT DIVISION, BRANCH       00240001
0055F4 9110 A000      00000        8369=          TM    0(R10),X'10'                OPT RELATIONAL ?           00241001
0055F8 4710 C384            05626  8370=          BO    HKA2                        YES, BRANCH                00242001
0055FC 9504 A000      00000        8371=HKG22     CLI   0(R10),X'04'                                           00243001
005600 4780 C58E            05830  8372=          BE    GOE112                                                 00244001
005604 4540 5310            00358  8373=HKG2      BAL   R4,SERR2                                               00245001
005608 00C2                        8374=          DC    H'194'                      ERROR 194                  00246001
                                   8375=*                                                                      00247001
00560A 4190 9005            00005  8376=GOE1      LA    R9,5(,R9)                                              00248001
00560E 4070 D5F8            005F8  8377=GOEZ      STH   R7,WORKPL                                              00249001
005612 D100 9003 D5F8 00003 005F8  8378=          MVN   3(1,R9),WORKPL                                         00250001
005618 D200 9004 D5F9 00004 005F9  8379=          MVC   4(1,R9),WORKPL+1                                       00251001
00561E 9608 9000      00000        8380=          OI    0(R9),X'08'                                            00252001
005622 46A0 5060            000A8  8381=GOF1      BCT   R10,COMP                    CLOP AND COMPARE           00253001
005626 9229 C38C      0562E        8382=HKA2      MVI   HKH4,X'29'                  PREPARE INSTRUCTIONS       00254001
00562A 4520 5598            005E0  8383=HKH41     BAL   R2,GENTXTP2                 GENERATE 2 BYTES           00255001
00562E 2A00                        8384=HKH4      ADR   0,0                         *** GENERATED CODE ***     00256001
005630 9510 A000      00000        8385=          CLI   0(R10),XFEQUAL                                         00257001
005634 4740 C4E6            05788  8386=          BL    GOE2                                                   00258001
005638 4A70 DA56            00A56  8387=IMB1      AH    R7,ONEENTRY                                            00259001
00563C 4070 D5F8            005F8  8388=          STH   R7,WORKPL                   CHECK MAX                  00260001
005640 4540 58BA            00902  8389=          BAL   R4,MAXCH                                               00261001
005644 D201 9008 D5F8 00008 005F8  8390=          MVC   8(2,R9),WORKPL                                         00262001
00564A D201 C408 D5F8 056AA 005F8  8391=          MVC   IMD2+2(2),WORKPL            PREPARE INSTRUCTION        00263001
005650 96A0 C408      056AA        8392=          OI    IMD2+2,X'A0'                                           00264001
005654 940F C40D      056AF        8393=          NI    IMH4+1,X'0F'                                           00265001
005658 91FF 518E      001D6        8394=          TM    SWREL,X'FF'                                            00266001
00565C 4710 C44C            056EE  8395=          BO    INE2                                                   00267001
005660 9511 A000      00000        8396=          CLI   0(R10),XFLT                 OPT < ?                    00268001
005664 4740 C434            056D6  8397=          BL    IME4                        =, BRANCH                  00269001
005668 4780 C43C            056DE  8398=          BE    IMG4                        YES, BRANCH                00270001
00566C 9513 A000      00000        8399=          CLI   0(R10),X'13'                                           00271001
005670 4780 C444            056E6  8400=          BE    IMH41                       BRANCH ON NOT EQUAL        00272001
005674 4740 C424            056C6  8401=          BL    IMC4                        BRANCH ON GREATER          00273001
005678 9515 A000      00000        8402=          CLI   0(R10),X'15'                                           00274001
00567C 4780 C42C            056CE  8403=          BE    IMD4                        BRANCH ON NOT LOW          00275001
005680 4720 C362            05604  8404=          BH    HKG2                        BRANCH ON ERROR            00276001
005684 96D0 C40D      056AF        8405=IMF4      OI    IMH4+1,X'D0'                PREPARE INSTRUCTION        00277001
005688 D201 C412 C408 056B4 056AA  8406=IMH51     MVC   IMH5+2(2),IMD2+2                                       00278001
00568E 4120 C406            056A8  8407=          LA    R2,IMD2                                                00279001
005692 45E0 5588            005D0  8408=          BAL   R14,GENTXTS                                            00280001
005696 000E                        8409=          DC    H'14'                       GENERATE 14 BYTES          00281001
005698 9603 9006      00006        8410=          OI    6(R9),X'03'                 ADJUST R9 ENTRY OF BLO     00282001
00569C 9640 9005      00005        8411=          OI    5(R9),X'40'                                            00283001
0056A0 945F 9005      00005        8412=          NI    5(R9),X'5F'                                            00284001
0056A4 47F0 C368            0560A  8413=          B     GOE1                        RETURN                     00285001
                                   8414=*                                                                      00286001
0056A8 9201 A000      00000        8415=IMD2      MVI   0(CDSA),X'01'               *** GENERATED CODE ***     00287001
0056AC 05F0                        8416=          BALR  BRR,0                       *** GENERATED CODE ***     00288001
0056AE 4700 F008            00008  8417=IMH4      NOP   8(0,BRR)                    *** GENERATED CODE ***     00289001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

0056B2 9200 A000       00000        8418=IMH5     MVI   0(CDSA),X'00'        *** GENERATED CODE ***       00290001
0056B6 922D C38C       0562E        8419=HKD2     MVI   HKH4,X'2D'                                        00291001
0056BA 47F0 C388             0562A  8420=         B     HKH41                                             00292001
                                    8421=*                                                                00293001
0056BE 922B C38C       0562E        8422=HKF2     MVI   HKH4,X'2B'                                        00294001
0056C2 47F0 C388             0562A  8423=         B     HKH41                                             00295001
                                    8424=*                                                                00296001
0056C6 9620 C40D       056AF        8425=IMC4     OI    IMH4+1,X'20'         SET BRANCH CONDITION IN GEN INST 00297001
0056CA 47F0 C3E6             05688  8426=         B     IMH51                                             00298001
                                    8427=*                                                                00299001
0056CE 96B0 C40D       056AF        8428=IMD4     OI    IMH4+1,X'B0'         SET BRANCH CONDITION IN GEN INST 00300001
0056D2 47F0 C3E6             05688  8429=         B     IMH51                                             00301001
                                    8430=*                                                                00302001
0056D6 9680 C40D       056AF        8431=IME4     OI    IMH4+1,X'80'         SET BRANCH CONDITION IN GEN INST 00303001
0056DA 47F0 C3E6             05688  8432=         B     IMH51                                             00304001
                                    8433=*                                                                00305001
0056DE 9640 C40D       056AF        8434=IMG4     OI    IMH4+1,X'40'         SET BRANCH CONDITION IN GEN INST 00306001
0056E2 47F0 C3E6             05688  8435=         B     IMH51                                             00307001
                                    8436=*                                                                00308001
0056E6 9670 C40D       056AF        8437=IMH41    OI    IMH4+1,X'70'         SET BRANCH CONDITION IN GEN INST 00309001
0056EA 47F0 C3E6             05688  8438=         B     IMH51                                             00310001
                                    8439=*                                                                00311001
0056EE 9200 518E       001D6        8440=INE2     MVI   SWREL,0              ZERO SWREL                   00312001
0056F2 9511 A000       00000        8441=         CLI   0(R10),XFLT          WHICH OPT                    00313001
0056F6 4740 C434             056D6  8442=         BL    IME4                 =, BRANCH                    00314001
0056FA 4780 C424             056C6  8443=         BE    IMC4                 <, BRANCH                    00315001
0056FE 9513 A000       00000        8444=         CLI   0(R10),X'13'                                      00316001
005702 4780 C444             056E6  8445=         BE    IMH41                BRANCH ON NOT EQUAL          00317001
005706 4740 C43C             056DE  8446=         BL    IMG4                 BRANCH ON GREATER            00318001
00570A 9515 A000       00000        8447=         CLI   0(R10),X'15'                                      00319001
00570E 4780 C3E2             05684  8448=         BE    IMF4                 BRANCH ON NOT LOW            00320001
005712 4720 C362             05604  8449=         BH    HKG2                 BRANCH ON ERROR              00321001
005716 47F0 C42C             056CE  8450=         B     IMD4                 PREPARE INSTRUCTION          00322001
                                    8451=*                                                                00323001
00571A 4540 5304             0034C  8452=GNB2     BAL   R4,SERR4                                          00324001
00571E 00A2                         8453=         DC    H'162'               ERROR 162                    00325001
                                    8454=*                                                                00326001
005720 9601 D080       00080        8455=         OI    COMPFLGS,OPERAND     SET OPERAND ON               00327001
005724 D204 9000 5182 00000 001CA   8456=GNE3     MVC   0(5,R9),API          INSTRUCTION API              00328001
00572A 46A0 5060             000A8  8457=         BCT   R10,COMP             CLOPT AND COMPARE            00329001
00572E 9110 9000       00000        8458=GND2     TM    0(R9),APIMASK        LO AN API ?                  00330001
005732 4780 C49C             0573E  8459=         BZ    GND21                LO IS NOT AN API, BRANCH     00331001
005736 4190 9005             00005  8460=GND3     LA    R9,5(,R9)            INCREASE R9                  00332001
00573A 47F0 C482             05724  8461=         B     GNE3                                              00333001
                                    8462=*                                                                00334001
00573E 4540 5310             00358  8463=GND21    BAL   R4,SERR2                                          00335001
005742 00A3                         8464=         DC    H'163'               ERROR 163                    00336001
                                    8465=*                                                                00337001
005744 47F0 C494             05736  8466=         B     GND3                                              00338001
                                    8467=*                                                                00339001
005748 9110 9005       00005        8468=GND22    TM    5(R9),APIMASK        BLO AN API ?                 00340001
00574C 4710 C494             05736  8469=         BO    GND3                 YES, BRANCH                  00341001
005750 06A0                         8470=         BCTR  R10,0                REDUCE R10                   00342001
005752 4540 5310             00358  8471=         BAL   R4,SERR2                                          00343001
005756 00A3                         8472=         DC    H'163'               ERROR  163                   00344001
005758 41A0 A001             00001  8473=         LA    R10,1(,R10)          INCREASE R10                 00345001
00575C 47F0 C494             05736  8474=         B     GND3                                              00346001
                                    8475=*                                                                00347001
005760 9504 A000       00000        8476=GOE11    CLI   0(R10),X'04'         OPT IN STACK INT# DIV ?      00348001
005764 4770 C4D6             05778  8477=         BNE   GOE111               NO, BRANCH                   00349001
005768 9102 9001       00001        8478=         TM    1(R9),X'02'          LO REAL ?                    00350001
00576C 4710 C58E             05830  8479=         BO    GOE112                                            00351001
005770 9102 9006       00006        8480=         TM    6(R9),X'02'          BLO REAL ?                   00352001
005774 4710 C58E             05830  8481=         BO    GOE112               YES, BRANCH                  00353001
005778 9110 A000       00000        8482=GOE111   TM    0(R10),X'10'         OPT RELATIONAL ?             00354001
00577C 4780 C368             0560A  8483=         BZ    GOE1                 NO, BRANCH                   00355001
005780 9603 9006       00006        8484=         OI    6(R9),X'03'          ADJUST R9 ENTRY OF BLO       00356001
005784 47F0 C368             0560A  8485=         B     GOE1                                              00357001
                                    8486=*                                                                00358001
005788 1BEE                         8487=GOE2     SR    R14,R14                                           00359001
00578A 94F0 DA70       00A70        8488=         NI    UPLACE,X'F0'                                      00360001
00578E 43E0 DA70             00A70  8489=         IC    R14,UPLACE                                        00361001
005792 88E0 0003             00003  8490=         SRL   R14,3                                             00362001
005796 4190 9005             00005  8491=         LA    R9,5(,R9)                                         00363001
00579A 509E D5E4             005E4  8492=         ST    R9,RUTR(R14)                                      00364001
00579E 88E0 0001             00001  8493=         SRL   R14,1                                             00365001
0057A2 40E0 DA44             00A44  8494=         STH   R14,CIR                                           00366001
0057A6 88E0 0001             00001  8495=         SRL   R14,1                                             00367001
0057AA 41F0 0001             00001  8496=         LA    R15,1                                             00368001
0057AE 89F0 E000             00000  8497=         SLL   R15,0(R14)                                        00369001
0057B2 42F0 C515             057B7  8498=         STC   R15,HEF21+1                                       00370001
0057B6 9600 DA49       00A49        8499=HEF21    OI    RIR+1,X'00'                                       00371001
0057BA 47F0 C36C             0560E  8500=         B     GOEZ                                              00372001
                                    8501=*                                                                00373001
0057BE D200 C56B DA70 0580D 00A70   8502=HLD1     MVC   HLJ4+1(1),UPLACE     PREPARE INSTRUCTION          00374001
0057C4 D100 C56B DA72 0580D 00A72   8503=         MVN   HLJ4+1(1),VPLACE                                  00375001
0057CA D201 C56C DA6A 0580E 00A6A   8504=         MVC   HLJ4+2(2),WPLACE                                  00376001
0057D0 926A C56A       0580C        8505=         MVI   HLJ4,X'6A'                                        00377001
0057D4 9501 A000       00000        8506=         CLI   0(R10),XFMINUS       OPT MINUS ?                  00378001
0057D8 4740 C566             05808  8507=         BL    HLJ41                +, BRANCH                    00379001
0057DC 4780 C5D0             05872  8508=         BE    HLF2                 MINUS, BRANCH                00380001
0057E0 926C C56A       0580C        8509=         MVI   HLJ4,X'6C'                                        00381001
0057E4 9503 A000       00000        8510=         CLI   0(R10),X'03'         DIVISION ?                   00382001
0057E8 4740 C566             05808  8511=         BL    HLJ41                                             00383001
0057EC 4780 C5C8             0586A  8512=         BE    HLB2                 YES, BRANCH                  00384001
0057F0 9110 A000       00000        8513=         TM    0(R10),X'10'         A RELATIONAL OPT ?           00385001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

0057F4 4780 C35A              055FC  8514=            BZ    HKG22                                                   00386001
0057F8 9260 C56A        0580C        8515=            MVI   HLJ4,X'60'                                              00387001
0057FC 9516 A000        00000        8516=            CLI   0(R10),XFASSIGN        OPT .= ?                         00388001
005800 4780 C566              05808  8517=            BE    HLJ41                  YES, BRANCH                      00389001
005804 9269 C56A        0580C        8518=HLA2        MVI   HLJ4,X'69'             PREPARE INSTRUCTION              00390001
005808 4520 5594              005DC  8519=HLJ41       BAL   R2,GENTXTP4            GENERATE 4 BYTES                 00391001
00580C 6A00 0000              00000  8520=HLJ4        AD    0,0(0,0)               *** GENERATED CODE ***           00392001
005810 9501 A000        00000        8521=            CLI   0(R10),XFMINUS         OPT MINUS ?                      00393001
005814 4780 C598              0583A  8522=            BE    HLF3                   YES, BRANCH                      00394001
005818 9516 A000        00000        8523=            CLI   0(R10),XFASSIGN        OPT ASSIGNMENT?                  00395001
00581C 4780 C304              055A6  8524=            BE    HLE21                  YES, BRANCH                      00396001
005820 9110 A000        00000        8525=            TM    0(R10),X'10'           OPT RELATIONAL ?                 00397001
005824 4710 C396              05638  8526=            BO    IMB1                   NO, BRANCH                       00398001
005828 9200 518E        001D6        8527=            MVI   SWREL,0                                                 00399001
00582C 47F0 C4E6              05788  8528=            B     GOE2                                                    00400001
                                     8529=*                                                                         00401001
005830 4540 5318              00360  8530=GOE112      BAL   R4,SERR3                                                00402001
005834 00B9                          8531=            DC    H'185'                                                  00403001
                                     8532=*                                                                         00404001
005836 47F0 C368              0560A  8533=            B     GOE1                                                    00405001
                                     8534=*                                                                         00406001
00583A 91FF 518E        001D6        8535=HLF3        TM    SWREL,X'FF'                                             00407001
00583E 4780 C4E6              05788  8536=            BZ    GOE2                                                    00408001
005842 9200 518E        001D6        8537=            MVI   SWREL,X'00'             SET TO ZERO SWREL               00409001
005846 D200 C5C3 DA70 05865 00A70    8538=            MVC   HLH3+1(1),UPLACE        PREPARE INSTRUCTION             00410001
00584C 1BEE                          8539=            SR    R14,R14                                                 00411001
00584E 43E0 DA70              00A70  8540=            IC    R14,UPLACE                                              00412001
005852 88E0 0004              00004  8541=            SRL   R14,4                                                   00413001
005856 42E0 D5F8              005F8  8542=            STC   R14,WORKPL                                              00414001
00585A D100 C5C3 D5F8 05865 005F8    8543=            MVN   HLH3+1(1),WORKPL                                        00415001
005860 4520 5598              005E0  8544=            BAL   R2,GENTXTP2             GENERATE 2 BYTES                00416001
005864 2300                          8545=HLH3        LCDR  0,0                     *** GENERATED CODE ***          00417001
005866 47F0 C4E6              05788  8546=            B     GOE2                                                    00418001
                                     8547=*                                                                         00419001
00586A 926D C56A        0580C        8548=HLB2        MVI   HLJ4,X'6D'                                              00420001
00586E 47F0 C566              05808  8549=            B     HLJ41                                                   00421001
                                     8550=*                                                                         00422001
005872 926B C56A        0580C        8551=HLF2        MVI   HLJ4,X'6B'                                              00423001
005876 47F0 C566              05808  8552=            B     HLJ41                                                   00424001
                                     8553=*                                                                         00425001
00587A 9102 9006        00006        8554=GOB3        TM    6(R9),X'02'            BLO REAL ?                       00426001
00587E 4710 CC84              05F26  8555=            BO    HTB1                   YES, BRANCH                      00427001
005882 9502 A000        00000        8556=            CLI   0(R10),XFASTER         OPT * ?                          00428001
005886 4740 C622              058C4  8557=            BL    DHZB1                                                   00429001
00588A 4780 C7E6              05A88  8558=            BE    IPB1                   YES, BRANCH                      00430001
00588E 9110 A000        00000        8559=            TM    0(R10),X'10'           OPT RELATIONAL ?                 00431001
005892 4710 C622              058C4  8560=            BO    DHZB1                                                   00432001
005896 9504 A000        00000        8561=            CLI   0(R10),X'04'           OPT INTEGER DIV ?                00433001
00589A 4780 CAAC              05D4E  8562=            BE    ISB1                   YES, BRANCH                      00434001
00589E 4720 CC94              05F36  8563=            BH    IUB1                   OPT IS POWER, BRANCH             00435001
0058A2 4540 545E              004A6  8564=HWB1        BAL   R4,TRINRE              CALL CONVERT ROUTINE             00436001
0058A6 D201 C618 9003 058BA 00003    8565=            MVC   HYG2+2(2),3(R9)                                         00437001
0058AC 4190 9005              00005  8566=            LA    R9,5(,R9)              INCREASE R9                      00438001
0058B0 4540 545E              004A6  8567=            BAL   R4,TRINRE                                               00439001
0058B4 4520 5594              005DC  8568=            BAL   R2,GENTXTP4            GENERATE 4 BYTES                 00440001
0058B8 6D0A 0000              00000  8569=HYG2        DD    0,0(CDSA,0)            *** GENERATED CODE ***           00441001
0058BC 4B70 DA56              00A56  8570=            SH    R7,ONEENTRY            REDUCE P                         00442001
0058C0 47F0 C36C              0560E  8571=            B     GOEZ                                                    00443001
                                     8572=*                                                                         00444001
0058C4 9120 9005        00005        8573=DHZB1       TM    5(R9),X'20'            BLO A VALUE ?                    00445001
0058C8 4710 C666              05908  8574=            BO    IAB1                   AN ADDR, BRANCH                  00446001
0058CC 9140 9005        00005        8575=            TM    5(R9),X'40'            BLO IN A REGISTER ?              00447001
0058D0 4710 C65A              058FC  8576=            BO    HZC2                   IN STORAGE, BRANCH               00448001
0058D4 D300 DA70 9008 00A70 00008    8577=            MVZ   UPLACE(1),8(R9)        V=R(BLO)                         00449001
0058DA 9110 A000        00000        8578=            TM    0(R10),X'10'           OPT RELATIONAL ?                 00450001
0058DE 4780 C644              058E6  8579=            BZ    HZF1                   ARITHMETIC, BRANCH               00451001
0058E2 4540 5AF2              00B3A  8580=            BAL   R4,ROUTINE8            CALL ROUTINE NUMBER 8            00452001
0058E6 4140 C764              05A06  8581=HZF1        LA    R4,IFC3                                                 00453001
0058EA 4530 5CB4              00CFC  8582=            BAL   R3,ROUTIN15            CALL ROUTINE NUMBER 15           00454001
0058EE D100 DA70 DA72 00A70 00A72    8583=            MVN   UPLACE(1),VPLACE       PREPARE INSTRUCTION              00455001
0058F4 4540 5AF2              00B3A  8584=            BAL   R4,ROUTINE8            RELILO                           00456001
0058F8 47F0 C730              059D2  8585=            B     IEC3                                                    00457001
                                     8586=*                                                                         00458001
0058FC 9180 9005        00005        8587=HZC2        TM    5(R9),X'80'            BLO IN A REGISTER ?              00459001
005900 4710 C666              05908  8588=            BO    IAB1                   NO, BRANCH                       00460001
005904 4B70 DA56              00A56  8589=            SH    R7,ONEENTRY            REDUCE P                         00461001
005908 9120 9000        00000        8590=IAB1        TM    0(R9),X'20'            LO A VALUE ?                     00462001
00590C 4710 C6F8              0599A  8591=            BO    IAD3                   AN ADDR, BRANCH                  00463001
005910 9140 9000        00000        8592=            TM    0(R9),X'40'            LO IN A REGISTER ?               00464001
005914 4710 C6EC              0598E  8593=            BO    IAC2                   IN STORAGE, BRANCH               00465001
005918 D300 DA70 9003 00A70 00003    8594=            MVZ   UPLACE(1),3(R9)        U=R(LO)                          00466001
00591E 9516 A000        00000        8595=            CLI   0(R10),XFASSIGN        OPT.= ?                          00467001
005922 4770 C698              0593A  8596=            BNE   IAE1                   NO, BRANCH                       00468001
005926 4540 5AF2              00B3A  8597=            BAL   R4,ROUTINE8            CALL ROUTINE NUMBER 8            00469001
00592A 4190 9005              00005  8598=            LA    R9,5(,R9)              INCREASE R9                      00470001
00592E 4540 5CB4              00CFC  8599=            BAL   R4,ROUTIN15            CALL ROUTINE NUMBER 15           00471001
005932 4B90 5170              001B8  8600=IAE21       SH    R9,KH5                 REDUCE R9                        00472001
005936 47F0 C764              05A06  8601=            B     IFC3                                                    00473001
                                     8602=*                                                                         00474001
00593A D204 D5F6 9000 005F6 00000    8603=IAE1        MVC   KONSUM(5),0(R9)        INTERCHANGE PLACES               00475001
005940 D204 9000 9005 00000 00005    8604=            MVC   0(5,R9),5(R9)                                           00476001
005946 D204 9005 D5F6 00005 005F6    8605=            MVC   5(5,R9),KONSUM                                          00477001
00594C 9110 A000        00000        8606=            TM    0(R10),X'10'           OPT ARITHMETIC ?                 00478001
005950 4710 C6E4              05986  8607=            BO    IAG2                   RELATIONAL, BRANCH               00479001
005954 1BEE                          8608=            SR    R14,R14                INTRODUCE R9 ADD IN RUM          00480001
005956 4190 9005              00005  8609=            LA    R9,5(,R9)                                               00481001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

00595A 43E9 0003              00003  8610=           IC    R14,3(R9)                                                   00482001
00595E 88E0 0004              00004  8611=           SRL   R14,4                                                       00483001
005962 89E0 0002              00002  8612=           SLL   R14,2                                                       00484001
005966 509E D5C0              005C0  8613=           ST    R9,RUTI(R14)                                                00485001
00596A 4B90 5170              001B8  8614=           SH    R9,KH5                  DECREASE R9                         00486001
00596E 92FF 518E        001D6        8615=IAJ1       MVI   SWREL,X'FF'             SWREL= ONE                          00487001
005972 9120 9000        00000        8616=IAF3       TM    0(R9),X'20'             LO A VALUE ?                        00488001
005976 4140 C764              05A06  8617=           LA    R4,IFC3                                                     00489001
00597A 4710 C6E0              05982  8618=           BO    IAK1                    AN ADDR, BRANCH                     00490001
00597E 47F0 593C              00984  8619=           B     ROUTINE1                BRANCH TO ROUTINE NUMBER 1          00491001
                                     8620=*                                                                            00492001
005982 47F0 59F2              00A3A  8621=IAK1       B     ROUTINE3                BRANCH TO ROUTINE NUMBER 3          00493001
                                     8622=*                                                                            00494001
005986 4540 5AF2              00B3A  8623=IAG2       BAL   R4,ROUTINE8             CALL ROUTINE NUMBER 8               00495001
00598A 47F0 C6CC              0596E  8624=           B     IAJ1                                                        00496001
                                     8625=*                                                                            00497001
00598E 9180 9000        00000        8626=IAC2       TM    0(R9),X'80'             LO IN A REGISTER ?                  00498001
005992 4710 C6F8              0599A  8627=           BO    IAD3                    NO, BRANCH                          00499001
005996 4B70 DA56              00A56  8628=           SH    R7,ONEENTRY             REDUCE P                            00500001
00599A 9516 A000        00000        8629=IAD3       CLI   0(R10),XFASSIGN         OPT.= ?                             00501001
00599E 4780 C1EE              05490  8630=           BE    HGD2                    YES, BRANCH                         00502001
0059A2 4540 5AB0              00AF8  8631=           BAL   R4,ROUTINE7             CALL ROUTINE NUMBER 7               00503001
0059A6 9120 9005        00005        8632=           TM    5(R9),X'20'             BLO A VALUE ?                       00504001
0059AA 4710 C728              059CA  8633=           BO    IAG3                    AN ADDR, BRANCH                     00505001
0059AE 4540 5A64              00AAC  8634=           BAL   R4,ROUTINE5             CALL ROUTINE NUMBER 5               00506001
0059B2 89E0 0004              00004  8635=IAH3       SLL   R14,4                   U=R(BLO)                            00507001
0059B6 42E0 DA70              00A70  8636=           STC   R14,UPLACE                                                  00508001
0059BA 9110 A000        00000        8637=           TM    0(R10),XFEQUAL                                              00509001
0059BE 4780 C6D0              05972  8638=           BZ    IAF3                                                        00510001
0059C2 4540 5AF2              00B3A  8639=           BAL   R4,ROUTINE8             CALL ROUTINE NUMBER 8               00511001
0059C6 47F0 C6D0              05972  8640=           B     IAF3                                                        00512001
                                     8641=*                                                                            00513001
0059CA 4540 5AA0              00AE8  8642=IAG3       BAL   R4,ROUTINE6             CALL ROUTINE NUMBER 6               00514001
0059CE 47F0 C710              059B2  8643=           B     IAH3                                                        00515001
                                     8644=*                                                                            00516001
0059D2 D200 C74F DA70 059F1 00A70    8645=IEC3       MVC   IED3+1(1),UPLACE        PREPARE INSTRUCTION                 00517001
0059D8 921A C74E        059F0        8646=           MVI   IED3,X'1A'                                                  00518001
0059DC 9501 A000        00000        8647=           CLI   0(R10),XFMINUS          OPT MINUS ?                         00519001
0059E0 4740 C74A              059EC  8648=           BL    IED31                   OPT PLUS, BRANCH                    00520001
0059E4 4720 C75C              059FE  8649=           BH    IED4                    OPT RELATIONAL, BRANCH              00521001
0059E8 921B C74E        059F0        8650=           MVI   IED3,X'1B'              PREPARE INSTRUCTION                 00522001
0059EC 4520 559E              005E6  8651=IED31      BAL   R2,GENTXT2              GENERATE 2 BYTES                    00523001
0059F0 1B00                          8652=IED3       SR    0,0                     *** GENERATED CODE ***              00524001
0059F2 9510 A000        00000        8653=           CLI   0(R10),X'10'                                                00525001
0059F6 4740 C368              0560A  8654=           BL    GOE1                                                        00526001
0059FA 47F0 C396              05638  8655=           B     IMB1                                                        00527001
                                     8656=*                                                                            00528001
0059FE 9219 C74E        059F0        8657=IED4       MVI   IED3,X'19'                                                  00529001
005A02 47F0 C74A              059EC  8658=           B     IED31                                                       00530001
                                     8659=*                                                                            00531001
005A06 D200 C78F DA70 05A31 00A70    8660=IFC3       MVC   IFD3+1(1),UPLACE        PREPARE INSTRUCTION                 00532001
005A0C D100 C78F DA72 05A31 00A72    8661=           MVN   IFD3+1(1),VPLACE                                            00533001
005A12 D201 C790 DA6A 05A32 00A6A    8662=           MVC   IFD3+2(2),WPLACE                                            00534001
005A18 925A C78E        05A30        8663=           MVI   IFD3,X'5A'                                                  00535001
005A1C 9501 A000        00000        8664=           CLI   0(R10),XFMINUS          WHICH OPT                           00536001
005A20 4740 C78A              05A2C  8665=           BL    IFD31                   +, BRANCH                           00537001
005A24 4720 C7C6              05A68  8666=           BH    IFD4                    RELATIONAL, BRANCH                  00538001
005A28 925B C78E        05A30        8667=           MVI   IFD3,X'5B'              PREPARE  INSTRUCTION                00539001
005A2C 4520 55A2              005EA  8668=IFD31      BAL   R2,GENTXT4              GENERATE 4 BYTES                    00540001
005A30 5B00 0000              00000  8669=IFD3       S     0,0(0,0)                *** GENERATED CODE ***              00541001
005A34 9501 A000        00000        8670=           CLI   0(R10),XFMINUS          WHICH OPERATOR                      00542001
005A38 4740 C7BE              05A60  8671=           BL    IFG3+2                  +, BRANCH                           00543001
005A3C 4720 C7DA              05A7C  8672=           BH    IFD41                   RELATIONAL, BRANCH                  00544001
005A40 95FF 518E        001D6        8673=           CLI   SWREL,X'FF'             SWREL = ONE                         00545001
005A44 4770 C7BE              05A60  8674=           BNE   IFG3+2                                                      00546001
005A48 43E0 DA70              00A70  8675=           IC    R14,UPLACE              PREPARE INSTRUCTION                 00547001
005A4C 88E0 0004              00004  8676=           SRL   R14,4                                                       00548001
005A50 42E0 C7BD              05A5F  8677=           STC   R14,IFG3+1                                                  00549001
005A54 D300 C7BD DA70 05A5F 00A70    8678=           MVZ   IFG3+1(1),UPLACE                                            00550001
005A5A 4520 559E              005E6  8679=           BAL   R2,GENTXT2              GENERATE 2 BYTES                    00551001
005A5E 1300                          8680=IFG3       LCR   0,0                     *** GENERATED CODE ***              00552001
005A60 9200 518E        001D6        8681=           MVI   SWREL,0                                                     00553001
005A64 47F0 C368              0560A  8682=           B     GOE1                                                        00554001
                                     8683=*                                                                            00555001
005A68 9259 C78E        05A30        8684=IFD4       MVI   IFD3,X'59'                                                  00556001
005A6C 9516 A000        00000        8685=           CLI   0(R10),XFASSIGN         OPT.= ?                             00557001
005A70 4770 C78A              05A2C  8686=           BNE   IFD31                   NO, BRANCH                          00558001
005A74 9250 C78E        05A30        8687=           MVI   IFD3,X'50'              PREPARE INSTRUCTION                 00559001
005A78 47F0 C78A              05A2C  8688=           B     IFD31                                                       00560001
                                     8689=*                                                                            00561001
005A7C 9516 A000        00000        8690=IFD41      CLI   0(R10),XFASSIGN         OPT.= ?                             00562001
005A80 4780 C304              055A6  8691=           BE    HLE21                   YES, BRANCH                         00563001
005A84 47F0 C396              05638  8692=           B     IMB1                    BRANCH TO RELATIONAL ROUTINE        00564001
                                     8693=*                                                                            00565001
                                     8694=*          INTEGER-INTEGER MULTIPLICATION                                    00566001
                                     8695=*                                                                            00567001
005A88 9120 9005        00005        8696=IPB1       TM    5(R9),X'20'             BLO A VALUE ?                       00568001
005A8C 4710 C9F6              05C98  8697=           BO    IRD1                    AN ADDR, BRANCH                     00569001
005A90 9140 9005        00005        8698=           TM    5(R9),X'40'             BLO A IN A REGISTER ?               00570001
005A94 4710 C9EA              05C8C  8699=           BO    IRB1                    IN STORAGE, BRANCH                  00571001
005A98 1B11                          8700=           SR    R1,R1                   BLO IN AN ODD REG ?                 00572001
005A9A 4310 9008              00008  8701=           IC    R1,8(,R9)                                                   00573001
005A9E 4210 DA70              00A70  8702=           STC   R1,UPLACE                                                   00574001
005AA2 8810 0004              00004  8703=           SRL   R1,4                                                        00575001
005AA6 4B70 DA56              00A56  8704=           SH    R7,ONEENTRY             DECREASE P                          00576001
005AAA 9110 DA70        00A70        8705=           TM    UPLACE,X'10'                                                00577001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

005AAE 4780 C9BA            05C5C  8706=           BZ    IPD2                 BLO IN EVEN GPR, BRANCH           00578001
005AB2 4120 0001            00001  8707=           LA    R2,1                 CLEAR RII OF BLO                  00579001
005AB6 8920 1000            00000  8708=           SLL   R2,0(R1)                                               00580001
005ABA 4220 C821            05AC3  8709=           STC   R2,IPH11+1                                             00581001
005ABE 97FF C821      05AC3        8710=           XI    IPH11+1,X'FF'                                          00582001
005AC2 9400 DA47      00A47        8711=IPH11      NI    RII+1,0                                                00583001
005AC6 0610                        8712=           BCTR  R1,0                 V=R(BLO-1)                        00584001
005AC8 94E0 DA70      00A70        8713=           NI    UPLACE,X'E0'                                           00585001
005ACC 8820 0001            00001  8714=           SRL   R2,1                 NEXT EVEN GPR FREE ?              00586001
005AD0 4220 C833            05AD5  8715=           STC   R2,IPH1+1                                              00587001
005AD4 9100 DA47      00A47        8716=IPH1       TM    RII+1,0                                                00588001
005AD8 4710 C8E0            05B82  8717=           BO    IPH31                                                  00589001
005ADC 4140 C8C2            05B64  8718=IPJ1       LA    R4,IQE2                                                00590001
005AE0 4530 5CB4            00CFC  8719=           BAL   R3,ROUTIN15          CALL ROUTINE NUMBER 15            00591001
005AE4 4540 5AF2            00B3A  8720=IQC1       BAL   R4,ROUTINE8          CALL ROUTINE NUMBER 8             00592001
005AE8 D300 C875 DA70 05B17 00A70  8721=IQD11      MVZ   IQD1+1(1),UPLACE     PREPARE INSTRUCTION               00593001
005AEE 1B22                        8722=           SR    R2,R2                                                  00594001
005AF0 4329 0003            00003  8723=           IC    R2,3(R9)                                               00595001
005AF4 8820 0004            00004  8724=           SRL   R2,4                                                   00596001
005AF8 4110 0001            00001  8725=IQC12      LA    R1,1                                                   00597001
005AFC 8910 2000            00000  8726=           SLL   R1,0(R2)                                               00598001
005B00 4210 C867            05B09  8727=           STC   R1,IQC13+1                                             00599001
005B04 97FF C867      05B09        8728=           XI    IQC13+1,X'FF'                                          00600001
005B08 9400 DA47      00A47        8729=IQC13      NI    RII+1,0                                                00601001
005B0C D100 C875 DA72 05B17 00A72  8730=           MVN   IQD1+1(1),VPLACE                                       00602001
005B12 4520 559E            005E6  8731=           BAL   R2,GENTXT2           GENERATE 2 BYTES                  00603001
005B16 1C00                        8732=IQD1       MR    0,0                  *** GENERATED CODE  ***           00604001
005B18 D300 C881 DA70 05B23 00A70  8733=IQE11      MVZ   IQE1+1(1),UPLACE     PREPARE INSTRUCTION               00605001
005B1E 4520 55A2            005EA  8734=           BAL   R2,GENTXT4           GENERATE 4 BYTES                  00606001
005B22 8F00 0020            00020  8735=IQE1       SLDA  0,32                 *** GENERATED CODE  ***           00607001
005B26 1B11                        8736=IQB1       SR    R1,R1                SET NEW CII                       00608001
005B28 4310 DA70            00A70  8737=           IC    R1,UPLACE                                              00609001
005B2C 8810 0004            00004  8738=           SRL   R1,4                                                   00610001
005B30 4210 DA43            00A43  8739=           STC   R1,CII+1                                               00611001
005B34 8910 0004            00004  8740=           SLL   R1,4                                                   00612001
005B38 4219 0008            00008  8741=           STC   R1,8(R9)                                               00613001
005B3C 8810 0004            00004  8742=           SRL   R1,4                                                   00614001
005B40 4120 0001            00001  8743=           LA    R2,1                 SET TO ONE RII OF BLO             00615001
005B44 8920 1000            00000  8744=           SLL   R2,0(R1)                                               00616001
005B48 4220 C8AB            05B4D  8745=           STC   R2,IQC14+1                                             00617001
005B4C 9600 DA47      00A47        8746=IQC14      OI    RII+1,0                                                00618001
005B50 4A70 DA56            00A56  8747=           AH    R7,ONEENTRY                                            00619001
005B54 8910 0002            00002  8748=           SLL   R1,2                                                   00620001
005B58 4190 9005            00005  8749=           LA    R9,5(,R9)                                              00621001
005B5C 5091 D5C0            005C0  8750=           ST    R9,RUTI(R1)                                            00622001
005B60 47F0 C36C            0560E  8751=           B     GOEZ                                                   00623001
                                   8752=*                                                                       00624001
005B64 D300 C8D9 DA70 05B7B 00A70  8753=IQE2       MVZ   IQE21+1(1),UPLACE    PREPARE INSTRUCTION               00625001
005B6A D100 C8D9 DA72 05B7B 00A72  8754=           MVN   IQE21+1(1),VPLACE                                      00626001
005B70 D201 C8DA DA6A 05B7C 00A6A  8755=           MVC   IQE21+2(2),WPLACE                                      00627001
005B76 4520 55A2            005EA  8756=           BAL   R2,GENTXT4           GENERATE 4 BYTES                  00628001
005B7A 5C00 0000            00000  8757=IQE21      M     0,0(0,0)             *** GENERATED CODE  ***           00629001
005B7E 47F0 C876            05B18  8758=           B     IQE11                                                  00630001
                                   8759=*                                                                       00631001
005B82 9120 9000      00000        8760=IPH31      TM    0(R9),X'20'          LO AN ADDR ?                      00632001
005B86 4710 C910            05BB2  8761=           BO    IPH4                 YES, BRANCH                       00633001
005B8A 9140 9000      00000        8762=           TM    0(R9),X'40'                                            00634001
005B8E 4710 C910            05BB2  8763=           BO    IPH4                                                   00635001
005B92 D300 D5F8 9003 005F8 00003  8764=IPH3       MVZ   WORKPL(1),3(R9)      LO IN THAT GPR ?                  00636001
005B98 94F0 D5F8      005F8        8765=           NI    WORKPL,X'F0'                                           00637001
005B9C 94F0 DA70      00A70        8766=           NI    UPLACE,X'F0'                                           00638001
005BA0 D500 DA70 D5F8 00A70 005F8  8767=           CLC   UPLACE(1),WORKPL                                       00639001
005BA6 4770 C910            05BB2  8768=           BNE   IPH4                 BRANCH IF NOT IN THAT GPR         00640001
005BAA 4B70 DA56            00A56  8769=           SH    R7,ONEENTRY          INCREASE P                        00641001
005BAE 47F0 C846            05AE8  8770=           B     IQD11                                                  00642001
                                   8771=*                                                                       00643001
005BB2 4110 1002            00002  8772=IPH4       LA    R1,2(,R1)            NEXT EVEN FREE                    00644001
005BB6 4910 5172            001BA  8773=           CH    R1,KH8               NEXT EVEN GPR8 ?                  00645001
005BBA 4780 C9B0            05C52  8774=           BE    IPH41                YES, BRANCH                       00646001
005BBE 8920 0002            00002  8775=           SLL   R2,2                                                   00647001
005BC2 4220 C925            05BC7  8776=IPH43      STC   R2,IPH42+1                                             00648001
005BC6 9100 DA47      00A47        8777=IPH42      TM    RII+1,0                                                00649001
005BCA 4780 C95C            05BFE  8778=           BZ    IPD3                 BRANCH IN FREE                    00650001
005BCE 9120 9000      00000        8779=           TM    0(R9),X'20'          LO A VALUE ?                      00651001
005BD2 4710 C94C            05BEE  8780=           BO    IPH44                                                  00652001
005BD6 9140 9000      00000        8781=           TM    0(R9),X'40'                                            00653001
005BDA 4710 C94C            05BEE  8782=           BO    IPH44                                                  00654001
005BDE 1B33                        8783=           SR    R3,R3                LO IN THAT GPR ?                  00655001
005BE0 4330 9003            00003  8784=           IC    R3,3(0,R9)                                             00656001
005BE4 8830 0004            00004  8785=           SRL   R3,4                                                   00657001
005BE8 1931                        8786=           CR    R3,R1                                                  00658001
005BEA 4780 C95C            05BFE  8787=           BE    IPD3                 YES, BRANCH                       00659001
005BEE 18E1                        8788=IPH44      LR    R14,R1                                                 00660001
005BF0 5020 D5B0            005B0  8789=           ST    R2,RETADR+56         SAVE CONTENTS OF R2 ACROSS RTN9   00661001
005BF4 4540 5B4E            00B96  8790=           BAL   R4,ROUTINE9          CALL ROUTINE NUMBER 9             00662001
005BF8 5820 D5B0            005B0  8791=           L     R2,RETADR+56                                           00663001
005BFC 181E                        8792=           LR    R1,R14                                                 00664001
005BFE 4110 1001            00001  8793=IPD3       LA    R1,1(,R1)            NEXT ODD FREE ?                   00665001
005C02 8920 0001            00001  8794=           SLL   R2,1                                                   00666001
005C06 4220 C969            05C0B  8795=IPD33      STC   R2,IPD31+1                                             00667001
005C0A 9100 DA47      00A47        8796=IPD31      TM    RII+1,0                                                00668001
005C0E 4780 C982            05C24  8797=           BZ    IPE3                                                   00669001
005C12 18E1                        8798=           LR    R14,R1                                                 00670001
005C14 4540 5B4E            00B96  8799=           BAL   R4,ROUTINE9          CALL ROUTINE NUMBER 9             00671001
005C18 181E                        8800=           LR    R1,R14                                                 00672001
005C1A 97FF C969      05C0B        8801=           XI    IPD31+1,X'FF'        CLEAR RII OF LAST CLEARED         00673001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

005C1E D400 DA47 C969 00A47 05C0B  8802=          NC    RII+1(1),IPD31+1                                         00674001
005C24 8910 0004            00004  8803=IPE3      SLL   R1,4                PREPARE INSTRUCTION                  00675001
005C28 4210 DA70            00A70  8804=          STC   R1,UPLACE                                                00676001
005C2C D200 C9AB DA70 05C4D 00A70  8805=          MVC   IPE31+1(1),UPLACE                                        00677001
005C32 94E0 DA70      00A70        8806=          NI    UPLACE,X'E0'                                             00678001
005C36 4320 9008            00008  8807=          IC    R2,8(,R9)                                                00679001
005C3A 8820 0004            00004  8808=          SRL   R2,4                                                     00680001
005C3E 4220 D5F8            005F8  8809=          STC   R2,WORKPL                                                00681001
005C42 D100 C9AB D5F8 05C4D 005F8  8810=          MVN   IPE31+1(1),WORKPL                                        00682001
005C48 4520 559E            005E6  8811=          BAL   R2,GENTXT2          GENERATE 2 BYTES                     00683001
005C4C 1800                        8812=IPE31     LR    0,0                 *** GENERATED CODE ***               00684001
005C4E 47F0 C83A            05ADC  8813=          B     IPJ1                                                     00685001
                                   8814=*                                                                        00686001
005C52 1B11                        8815=IPH41     SR    R1,R1                                                    00687001
005C54 4120 0001            00001  8816=          LA    R2,1                                                     00688001
005C58 47F0 C920            05BC2  8817=          B     IPH43                                                    00689001
                                   8818=*                                                                        00690001
005C5C 1B22                        8819=IPD2      SR    R2,R2               LO IN NEXT GPR ?                     00691001
005C5E 4110 1001            00001  8820=          LA    R1,1(0,R1)                                               00692001
005C62 9120 9000      00000        8821=          TM    0(R9),X'20'                                              00693001
005C66 4710 C9DE            05C80  8822=          BO    IPD21                                                    00694001
005C6A 9140 9000      00000        8823=          TM    0(R9),X'40'                                              00695001
005C6E 4710 C9DE            05C80  8824=          BO    IPD21                                                    00696001
005C72 4320 9003            00003  8825=          IC    R2,3(,R9)                                                00697001
005C76 8820 0004            00004  8826=          SRL   R2,4                                                     00698001
005C7A 1912                        8827=          CR    R1,R2                                                    00699001
005C7C 4780 CA9E            05D40  8828=          BE    IQC11               YES,  BRANCH                         00700001
005C80 4120 0001            00001  8829=IPD21     LA    R2,1                                                     00701001
005C84 8920 1000            00000  8830=          SLL   R2,0(R1)                                                 00702001
005C88 47F0 C964            05C06  8831=          B     IPD33                                                    00703001
                                   8832=*                                                                        00704001
005C8C 9180 9005      00005        8833=IRB1      TM    5(R9),X'80'         BLO IN A GPR ?                       00705001
005C90 4710 C9F6            05C98  8834=          BO    IRD1                                                     00706001
005C94 4B70 DA56            00A56  8835=          SH    R7,ONEENTRY                                              00707001
005C98 9101 DA43      00A43        8836=IRD1      TM    CII+1,X'01'         LAST OCCUPIED REG ODD ?              00708001
005C9C 4710 CA88            05D2A  8837=          BO    IRD11               YES, BRANCH                          00709001
005CA0 9106 DA43      00A43        8838=          TM    CII+1,X'06'         LAST OCCUPIED R6 ?                   00710001
005CA4 4710 CA82            05D24  8839=          BO    IRD12               YES, BRANCH                          00711001
005CA8 1B11                        8840=          SR    R1,R1                                                    00712001
005CAA 4310 DA43            00A43  8841=          IC    R1,CII+1            NEXT EVEN REG FREE ?                 00713001
005CAE 4110 1002            00002  8842=          LA    R1,2(,R1)                                                00714001
005CB2 4120 0001            00001  8843=IRD14     LA    R2,1                                                     00715001
005CB6 4210 DA43            00A43  8844=          STC   R1,CII+1                                                 00716001
005CBA 8920 1000            00000  8845=          SLL   R2,0(R1)                                                 00717001
005CBE 18E1                        8846=          LR    R14,R1                                                   00718001
005CC0 4220 CA23            05CC5  8847=          STC   R2,IRD13+1                                               00719001
005CC4 9100 DA47      00A47        8848=IRD13     TM    RII+1,0                                                  00720001
005CC8 4780 CA38            05CDA  8849=          BZ    IRF1                FREE, BRANCH                         00721001
005CCC 5020 D5AC            005AC  8850=          ST    R2,RETADR+52                                             00722001
005CD0 4540 5B4E            00B96  8851=          BAL   R4,ROUTINE9         CALL ROUTINE NUMBER 9                00723001
005CD4 5820 D5AC            005AC  8852=          L     R2,RETADR+52                                             00724001
005CD8 181E                        8853=          LR    R1,R14                                                   00725001
005CDA 8920 0001            00001  8854=IRF1      SLL   R2,1                NEXT ODD FREE ?                      00726001
005CDE D600 DA47 CA23 00A47 05CC5  8855=          OC    RII+1(0),IRD13+1                                         00727001
005CE4 89E0 0004            00004  8856=          SLL   R14,4                                                    00728001
005CE8 42E0 DA70            00A70  8857=          STC   R14,UPLACE                                               00729001
005CEC 4220 CA55            05CF7  8858=          STC   R2,IRF11+1                                               00730001
005CF0 4110 1001            00001  8859=          LA    R1,1(,R1)                                                00731001
005CF4 18E1                        8860=          LR    R14,R1                                                   00732001
005CF6 9100 DA47      00A47        8861=IRF11     TM    RII+1,0                                                  00733001
005CFA 4780 CA6A            05D0C  8862=          BZ    IRG1                BRANCH IF FREE                       00734001
005CFE 97FF CA55      05CF7        8863=          XI    IRF11+1,X'FF'                                            00735001
005D02 D400 DA47 CA55 00A47 05CF7  8864=          NC    RII+1(1),IRF11+1                                         00736001
005D08 4540 5B4E            00B96  8865=          BAL   R4,ROUTINE9         CALL ROUTINE NUMBER 9                00737001
005D0C 9120 9005      00005        8866=IRG1      TM    5(R9),X'20'         BLO A VALUE ?                        00738001
005D10 4710 CA7A            05D1C  8867=          BO    IRA1                AN ADDR, BRANCH                      00739001
005D14 4540 5A64            00AAC  8868=          BAL   R4,ROUTINE5         CALL ROUTINE NUMBER 5                00740001
005D18 47F0 C83A            05ADC  8869=          B     IPJ1                                                     00741001
                                   8870=*                                                                        00742001
005D1C 4540 5AA0            00AE8  8871=IRA1      BAL   R4,ROUTINE6         CALL ROUTINE NUMBER 6                00743001
005D20 47F0 C83A            05ADC  8872=          B     IPJ1                                                     00744001
                                   8873=*                                                                        00745001
005D24 1B11                        8874=IRD12     SR    R1,R1                                                    00746001
005D26 47F0 CA10            05CB2  8875=          B     IRD14                                                    00747001
                                   8876=*                                                                        00748001
005D2A 9107 DA43      00A43        8877=IRD11     TM    CII+1,X'07'         LAST OCCUPIED R7 ?                   00749001
005D2E 4710 CA82            05D24  8878=          BO    IRD12                                                    00750001
005D32 1B11                        8879=          SR    R1,R1                                                    00751001
005D34 4310 DA43            00A43  8880=          IC    R1,CII+1                                                 00752001
005D38 4110 1001            00001  8881=          LA    R1,1(,R1)           INCR                                 00753001
005D3C 47F0 CA10            05CB2  8882=          B     IRD14                                                    00754001
                                   8883=*                                                                        00755001
005D40 0620                        8884=IQC11     BCTR  R2,0                                                     00756001
005D42 4220 DA72            00A72  8885=          STC   R2,VPLACE                                                00757001
005D46 4B70 DA56            00A56  8886=          SH    R7,ONEENTRY                                              00758001
005D4A 47F0 C846            05AE8  8887=          B     IQD11                                                    00759001
                                   8888=*                                                                        00760001
                                   8889=*         INTEGER-INTEGER DIVISION                                       00761001
                                   8890=*                                                                        00762001
005D4E 9120 9005      00005        8891=ISB1      TM    5(R9),X'20'         BLO A VALUE ?                        00763001
005D52 4710 CC02            05EA4  8892=          BO    ISB4                AN ADDR, BRANCH                      00764001
005D56 9140 9005      00005        8893=          TM    5(R9),X'40'         BLO IN A GPR ?                       00765001
005D5A 4710 CBF6            05E98  8894=          BO    ISC2                IN STORAGE, BRANCH                   00766001
005D5E 1BEE                        8895=          SR    R14,R14             CLEAR RII OF BLO                     00767001
005D60 43E9 0008            00008  8896=          IC    R14,8(R9)                                                00768001
005D64 88E0 0004            00004  8897=          SRL   R14,4                                                    00769001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

005D68 4120 0001              00001  8898=         LA    R2,1                                                        00770001
005D6C 8920 E000              00000  8899=         SLL   R2,0(R14)                                                   00771001
005D70 4220 CAD7              05D79  8900=         STC   R2,ISE3+1                                                   00772001
005D74 97FF CAD7        05D79        8901=         XI    ISE3+1,X'FF'                                                00773001
005D78 9400 DA47        00A47        8902=ISE3     NI    RII+1,X'00'                                                 00774001
005D7C 4B70 DA56              00A56  8903=         SH    R7,ONEENTRY                                                 00775001
005D80 9110 9008        00008        8904=         TM    8(R9),X'10'               BLO IN AN EVEN GPR ?              00776001
005D84 4710 CB96              05E38  8905=         BO    ISG4                      ODD, BRANCH                       00777001
005D88 8920 0001              00001  8906=ISH11    SLL   R2,1                      NEXT ODD FREE ?                   00778001
005D8C 41E0 E001              00001  8907=         LA    R14,1(,R14)                                                 00779001
005D90 4220 CAF3              05D95  8908=         STC   R2,ISH1+1                                                   00780001
005D94 9100 DA47        00A47        8909=ISH1     TM    RII+1,0                                                     00781001
005D98 4710 CB52              05DF4  8910=         BO    ISH2                      OCCUPIED, BRANCH                  00782001
005D9C D300 CB05 9008 05DA7 00008    8911=ISJ11    MVZ   ISJ1+1(1),8(R9)           PREPARE INSTRUCTION               00783001
005DA2 4520 55A2              005EA  8912=         BAL   R2,GENTXT4                GENERATE 4 BYTES                  00784001
005DA6 8E00 0020              00020  8913=ISJ1     SRDA  0,32                      *** GENERATED CODE ***            00785001
005DAA 4140 CB34              05DD6  8914=         LA    R4,ITF21                                                    00786001
005DAE 4530 5CB4              00CFC  8915=         BAL   R3,ROUTIN15               CALL ROUTINE NUMBER 5             00787001
005DB2 4540 5AF2              00B3A  8916=         BAL   R4,ROUTINE8               CALL ROUTINE NUMBER 8             00788001
005DB6 D300 CB25 9008 05DC7 00008    8917=         MVZ   ITE1+1(1),8(R9)           PREPARE INSTRUCTION               00789001
005DBC D100 CB25 DA72 05DC7 00A72    8918=         MVN   ITE1+1(1),VPLACE                                            00790001
005DC2 4520 559E              005E6  8919=         BAL   R2,GENTXT2                GENERATE 2 BYTES                  00791001
005DC6 1D00                          8920=ITE1     DR    0,0                       *** GENERATED CODE ***            00792001
005DC8 D300 DA70 9008 00A70 00008    8921=ITZZ     MVZ   UPLACE(1),8(R9)                                             00793001
005DCE 9610 DA70        00A70        8922=         OI    UPLACE,X'10'                                                00794001
005DD2 47F0 C884              05B26  8923=         B     IQB1                                                        00795001
                                     8924=*                                                                          00796001
005DD6 D300 CB4B 9008 05DED 00008    8925=ITF21    MVZ   ITF2+1(1),8(R9)           PREPARE INSTRUCTION               00797001
005DDC D100 CB4B DA72 05DED 00A72    8926=         MVN   ITF2+1(1),VPLACE                                            00798001
005DE2 D201 CB4C DA6A 05DEE 00A6A    8927=         MVC   ITF2+2(2),WPLACE                                            00799001
005DE8 4520 55A2              005EA  8928=         BAL   R2,GENTXT4                GENERATE 4 BYTES                  00800001
005DEC 5D00 0000              00000  8929=ITF2     D     0,0(0,0)                  *** GENERATED CODE ***            00801001
005DF0 47F0 CB26              05DC8  8930=         B     ITZZ                                                        00802001
                                     8931=*                                                                          00803001
005DF4 9120 9000        00000        8932=ISH2     TM    0(R9),X'20'               LO A VALUE ?                      00804001
005DF8 4710 CB8E              05E30  8933=         BO    ISH3                      AN ADDR, BRANCH                   00805001
005DFC 9140 9000        00000        8934=         TM    0(R9),X'40'               LO IN A GPR ?                     00806001
005E00 4710 CB8E              05E30  8935=         BO    ISH3                                                        00807001
005E04 1B33                          8936=         SR    R3,R3                     LO IN THAT GPR ?                  00808001
005E06 4339 0003              00003  8937=         IC    R3,3(R9)                                                    00809001
005E0A 8830 0004              00004  8938=         SRL   R3,4                                                        00810001
005E0E 4230 DA72              00A72  8939=         STC   R3,VPLACE                                                   00811001
005E12 193E                          8940=         CR    R3,R14                                                      00812001
005E14 4770 CB8E              05E30  8941=         BNE   ISH3                      NO THERE, BRANCH                  00813001
005E18 D100 CB81 DA72 05E23 00A72    8942=         MVN   ISJ2+1(1),VPLACE          PREPARE INSTRUCTION               00814001
005E1E 4520 559E              005E6  8943=         BAL   R2,GENTXT2                GENERATE 2 BYTES                  00815001
005E22 18E0                          8944=ISJ2     LR    R14,0                     *** GENERATED CODE ***            00816001
005E24 940F 9003        00003        8945=         NI    3(R9),X'0F'               ADJUST R9 ENTRY                   00817001
005E28 96E0 9003        00003        8946=         OI    3(R9),X'E0'                                                 00818001
005E2C 47F0 CAFA              05D9C  8947=         B     ISJ11                                                       00819001
                                     8948=*                                                                          00820001
005E30 4540 5B4E              00B96  8949=ISH3     BAL   R4,ROUTINE9               CALL ROUTINE NUMBER 8             00821001
005E34 47F0 CAFA              05D9C  8950=         B     ISJ11                                                       00822001
                                     8951=*                                                                          00823001
005E38 41E0 E001              00001  8952=ISG4     LA    R14,1(,R14)               NEXT EVEN FREE ?                  00824001
005E3C 9107 DA43        00A43        8953=         TM    CII+1,X'07'               NEXT EVEN GPR7                    00825001
005E40 4710 CC6E              05F10  8954=         BO    ISG401                    YES                               00826001
005E44 8920 0001              00001  8955=         SLL   R2,1                                                        00827001
005E48 4220 CBAB              05E4D  8956=         STC   R2,ISG41+1                                                  00828001
005E4C 9100 DA47        00A47        8957=ISG41    TM    RII+1,0                                                     00829001
005E50 4780 CBC4              05E66  8958=         BZ    ISH4                      BRANCH IF FREE                    00830001
005E54 5020 D578              00578  8959=         ST    R2,RETADR                                                   00831001
005E58 4540 5B4E              00B96  8960=         BAL   R4,ROUTINE9               STOPINT                           00832001
005E5C 97FF CBAB        05E4D        8961=         XI    ISG41+1,X'FF'                                               00833001
005E60 D400 DA47 CBAB 00A47 05E4D    8962=         NC    RII+1(1),ISG41+1                                            00834001
005E66 89E0 0004              00004  8963=ISH4     SLL   R14,4                     PREPARE INSTRUCTION               00835001
005E6A 42E0 CBE3              05E85  8964=         STC   R14,ISH41+1                                                 00836001
005E6E 4319 0008              00008  8965=         IC    R1,8(R9)                                                    00837001
005E72 8810 0004              00004  8966=         SRL   R1,4                                                        00838001
005E76 4210 D5F8              005F8  8967=         STC   R1,WORKPL                                                   00839001
005E7A D100 CBE3 D5F8 05E85 005F8    8968=         MVN   ISH41+1(1),WORKPL                                           00840001
005E80 4520 559E              005E6  8969=         BAL   R2,GENTXT2                GENERATE 2 BYTES                  00841001
005E84 1800                          8970=ISH41    LR    0,0                       *** GENERATED CODE ***            00842001
005E86 5820 D578              00578  8971=         L     R2,RETADR                                                   00843001
005E8A D300 9008 CBE3 00008 05E85    8972=         MVZ   8(1,R9),ISH41+1           ADJUST R9 ENTRY                   00844001
005E90 88E0 0004              00004  8973=         SRL   R14,4                                                       00845001
005E94 47F0 CAE6              05D88  8974=         B     ISH11                                                       00846001
                                     8975=*                                                                          00847001
005E98 9180 9005        00005        8976=ISC2     TM    5(R9),X'80'               BLO IN A REG ?                    00848001
005E9C 4710 CC02              05EA4  8977=         BO    ISB4                      NO, BRANCH                        00849001
005EA0 4B70 DA56              00A56  8978=         SH    R7,ONEENTRY               REDUCE P                          00850001
005EA4 9101 DA43        00A43        8979=ISB4     TM    CII+1,X'01'               LAST OCCUPIED EVEN ?              00851001
005EA8 4710 CC5A              05EFC  8980=         BO    ISD5                      ODD, BRANCH                       00852001
005EAC 9106 DA43        00A43        8981=         TM    CII+1,X'06'               LAST OCCUPIEN R6 ?                00853001
005EB0 4710 CC54              05EF6  8982=         BO    ISD51                     YES, BRANCH                       00854001
005EB4 1B11                          8983=         SR    R1,R1                                                       00855001
005EB6 4310 DA43              00A43  8984=         IC    R1,CII+1                                                    00856001
005EBA 4110 1002              00002  8985=         LA    R1,2(,R1)                                                   00857001
005EBE 4120 0001              00001  8986=ISD52    LA    R2,1                                                        00858001
005EC2 8920 1000              00000  8987=         SLL   R2,0(R1)                                                    00859001
005EC6 4220 CC2B              05ECD  8988=         STC   R2,ISE4+1                                                   00860001
005ECA 18E1                          8989=         LR    R14,R1                                                      00861001
005ECC 9100 DA47        00A47        8990=ISE4     TM    RII+1,0                                                     00862001
005ED0 4780 CC36              05ED8  8991=         BZ    ISF4                      BRANCH IF FREE                    00863001
005ED4 4540 5B4E              00B96  8992=         BAL   R4,ROUTINE9               CALL ROUTINE NUMBER 9             00864001
005ED8 9120 9005        00005        8993=ISF4     TM    5(R9),X'20'               BLO A VALUE ?                     00865001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

005EDC 4710 CC4C              05EEE  8994=            BO    ISF41                  AN ADDR, BRANCH        00866001
005EE0 4540 5A64              00AAC  8995=            BAL   R4,ROUTINE5            CALL ROUTINE NUMBER 5  00867001
005EE4 1B22                          8996=ISF42       SR    R2,R2                                         00868001
005EE6 4320 CC2B              05ECD  8997=            IC    R2,ISE4+1                                     00869001
005EEA 47F0 CAE6              05D88  8998=            B     ISH11                                         00870001
                                     8999=*                                                               00871001
005EEE 4540 5AA0              00AE8  9000=ISF41       BAL   R4,ROUTINE6            LOAD BLO               00872001
005EF2 47F0 CC42              05EE4  9001=            B     ISF42                                         00873001
                                     9002=*                                                               00874001
005EF6 1B11                          9003=ISD51       SR    R1,R1                  CLEAR R1               00875001
005EF8 47F0 CC1C              05EBE  9004=            B     ISD52                                         00876001
                                     9005=*                                                               00877001
005EFC 9107 DA43        00A43        9006=ISD5        TM    CII+1,X'07'            LAST OCCUPIED R7 ?     00878001
005F00 4710 CC54              05EF6  9007=            BO    ISD51                  YES, BRANCH            00879001
005F04 4810 DA42              00A42  9008=            LH    R1,CII                                        00880001
005F08 4110 1001              00001  9009=            LA    R1,1(,R1)                                     00881001
005F0C 47F0 CC1C              05EBE  9010=            B     ISD52                                         00882001
                                     9011=*                                                               00883001
005F10 1BEE                          9012=ISG401      SR    R14,R14                CLEAR R14              00884001
005F12 4120 0001              00001  9013=            LA    R2,1                                          00885001
005F16 4220 CBAB              05E4D  9014=            STC   R2,ISG41+1                                    00886001
005F1A 47F0 CBAA              05E4C  9015=            B     ISG41                                         00887001
                                     9016=*                                                               00888001
005F1E 4540 CF86              06228  9017=HQB1        BAL   R4,I1B13                                      00889001
005F22 47F0 C044              052E6  9018=            B     HEB1                                          00890001
                                     9019=*                                                               00891001
005F26 9505 A000        00000        9020=HTB1        CLI   0(R10),XFPOWER         OPT POWER ?            00892001
005F2A 4780 CDF0              06092  9021=            BE    I1B1                                          00893001
005F2E 4540 545E              004A6  9022=HTB11       BAL   R4,TRINRE              CONVERTION ROUTINE     00894001
005F32 47F0 C04C              052EE  9023=            B     DHEB2                                         00895001
                                     9024=*                                                               00896001
                                     9025=*           INTEGER-INTEGER POWER                               00897001
                                     9026=*                                                               00898001
005F36 91C0 9000        00000        9027=IUB1        TM    0(R9),X'C0'                                   00899001
005F3A 47E0 CD94              06036  9028=            BNO   IUB2                                          00900001
005F3E 9130 9001        00001        9029=            TM    1(R9),X'30'                                   00901001
005F42 4770 CD94              06036  9030=            BNZ   IUB2                   NOT CONSTANT, BRANCH   00902001
005F46 91FF 518C        001D4        9031=            TM    SWVAL,X'FF'                                   00903001
005F4A 4710 CD94              06036  9032=            BO    IUB2                                          00904001
005F4E 9101 DA47        00A47        9033=            TM    RII+1,X'01'            R0 FREE ?              00905001
005F52 4780 CCBA              05F5C  9034=            BZ    IUC1                   YES, BRANCH            00906001
005F56 1BEE                          9035=            SR    R14,R14                R14=0                  00907001
005F58 4540 5B4E              00B96  9036=            BAL   R4,ROUTINE9            CALL ROUTINE NUMBER 9  00908001
005F5C 9102 DA47        00A47        9037=IUC1        TM    RII+1,X'02'            R1 FREE ?              00909001
005F60 4780 CCCE              05F70  9038=            BZ    IUC11                  YES, BRANCH            00910001
005F64 41E0 0001              00001  9039=            LA    R14,1                                         00911001
005F68 4540 5B4E              00B96  9040=            BAL   R4,ROUTINE9            CALL ROUTINE NUMBER 9  00912001
005F6C 94FD DA47        00A47        9041=            NI    RII+1,X'FD'                                   00913001
005F70 4A70 DA56              00A56  9042=IUC11       AH    R7,ONEENTRY            INCREASE P             00914001
005F74 4070 CD80              06022  9043=            STH   R7,IUG2+2              PREPARE INSTRUCTION    00915001
005F78 4A70 DA56              00A56  9044=            AH    R7,ONEENTRY            INCREASE P             00916001
005F7C 4070 D5F8              005F8  9045=            STH   R7,WORKPL              CHECK MAX              00917001
005F80 4540 58BA              00902  9046=            BAL   R4,MAXCH                                      00918001
005F84 4B70 DA56              00A56  9047=            SH    R7,ONEENTRY                                   00919001
005F88 4190 9005              00005  9048=            LA    R9,5(,R9)                                     00920001
005F8C 4140 CD12              05FB4  9049=            LA    R4,IUH21                                      00921001
005F90 4530 5CB4              00CFC  9050=            BAL   R3,ROUTIN15            CALL ROUTINE NUMBER 15 00922001
005F94 1BEE                          9051=            SR    R14,R14                STORE BLO              00923001
005F96 4B70 DA56              00A56  9052=            SH    R7,ONEENTRY                                   00924001
005F9A 43E0 9003              00003  9053=            IC    R14,3(,R9)                                    00925001
005F9E 88E0 0004              00004  9054=            SRL   R14,4                                         00926001
005FA2 4540 5B4E              00B96  9055=            BAL   R4,ROUTINE9            CALL ROUTINE NUMBER 9  00927001
005FA6 4540 5AF2              00B3A  9056=            BAL   R4,ROUTINE8            CALL ROUTINE NUMBER 8  00928001
005FAA D201 DA6A 9003 00A6A 00003    9057=            MVC   WPLACE(2),3(R9)                               00929001
005FB0 92AA DA72        00A72        9058=            MVI   VPLACE,X'AA'           V=CDSA                 00930001
005FB4 D201 CD84 DA6A 06026 00A6A    9059=IUH21       MVC   IUH2+2(2),WPLACE       PREPARE INSTRUCTION    00931001
005FBA D100 CD83 DA72 06025 00A72    9060=            MVN   IUH2+1(1),VPLACE                              00932001
005FC0 4B90 5170              001B8  9061=            SH    R9,KH5                                        00933001
005FC4 4120 CD7E              06020  9062=            LA    R2,IUG2                                       00934001
005FC8 45E0 5588              005D0  9063=            BAL   R14,GENTXTS                                   00935001
005FCC 0008                          9064=            DC    H'8'                   GENERATE 8 BYTES       00936001
                                     9065=*                                                               00937001
005FCE 4540 593C              00984  9066=            BAL   R4,ROUTINE1            CALL ROUTINE NUMBER 1  00938001
005FD2 D201 CD88 DA6A 0602A 00A6A    9067=            MVC   IUH2+6(2),WPLACE                              00939001
005FD8 D100 CD87 DA72 06029 00A72    9068=            MVN   IUH2+5(1),VPLACE                              00940001
005FDE 4120 CD86              06028  9069=            LA    R2,IUH2+4                                     00941001
005FE2 45E0 5588              005D0  9070=            BAL   R14,GENTXTS                                   00942001
005FE6 000E                          9071=            DC    H'14'                  GENERATE 14 BYTES      00943001
                                     9072=*                                                               00944001
005FE8 9601 DA47        00A47        9073=            OI    RII+1,X'01'            SET TO ONE RII OF GPR0 00945001
005FEC 9200 DA43        00A43        9074=            MVI   CII+1,0                                       00946001
005FF0 4070 D5F8              005F8  9075=            STH   R7,WORKPL              ADJUST R9 ENTRY        00947001
005FF4 D201 9008 D5F8 00008 005F8    9076=            MVC   8(2,R9),WORKPL                                00948001
005FFA 4190 9005              00005  9077=            LA    R9,5(0,R9)                                    00949001
005FFE 5090 D5C0              005C0  9078=            ST    R9,RUTI                INTRODUCE R9 ADD IN RUT 00950001
006002 D200 9002 DA5D 00002 00A5D    9079=            MVC   2(1,R9),SPBNST+1       ADJUST R9 ENTRY        00951001
006008 9630 9001        00001        9080=            OI    1(R9),X'30'                                   00952001
00600C 9490 9000        00000        9081=            NI    0(R9),X'90'                                   00953001
006010 9688 9000        00000        9082=            OI    0(R9),X'88'                                   00954001
006014 58E0 D61C              0061C  9083=            L     R14,LATAB                                     00955001
006018 947F E060        00060        9084=            NI    96(R14),X'7F'                                 00956001
00601C 46A0 5060              000A8  9085=            BCT   R10,COMP                                      00957001
006020 411A 0007              00007  9086=IUG2        LA    R1,R7(CDSA,0)          *** GENERATED CODE *** 00958001
006024 41E0 0000              00000  9087=IUH2        LA    R14,0(0,0)             *** GENERATED CODE *** 00959001
006028 41F0 0000              00000  9088=            LA    BRR,0(0,0)             *** GENERATED CODE *** 00960001
00602C 90EF 1000              00000  9089=            STM   R14,BRR,0(R1)          *** GENERATED CODE *** 00961001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

006030 58FC 0060            00060  9090=          L    ENTRY,96(LAT,0)         *** GENERATED CODE ***             00962001
006034 05EF                        9091=          BALR R14,ENTRY               *** GENERATED CODE ***             00963001
                                   9092=*                                                                         00964001
006036 4140 CDF0            06092  9093=IUB2      LA   R4,I1B1                                                    00965001
00603A 9120 9000      00000        9094=          TM   0(R9),X'20'                                                00966001
00603E 4710 CF86            06228  9095=          BO   I1B13                                                      00967001
006042 9140 9000      00000        9096=          TM   0(R9),X'40'                                                00968001
006046 4710 CF86            06228  9097=          BO   I1B13                                                      00969001
00604A 9120 9005      00005        9098=          TM   5(R9),X'20'                                                00970001
00604E 4710 CF86            06228  9099=          BO   I1B13                                                      00971001
006052 9140 9005      00005        9100=          TM   5(R9),X'40'                                                00972001
006056 4710 CF86            06228  9101=          BO   I1B13                                                      00973001
00605A 1BEE                        9102=          SR   R14,R14                                                    00974001
00605C 43E9 0008            00008  9103=          IC   R14,8(R9)                                                  00975001
006060 88E0 0004            00004  9104=          SRL  R14,4                                                      00976001
006064 41F0 0001            00001  9105=          LA   R15,1                                                      00977001
006068 89F0 E000            00000  9106=          SLL  R15,0(R14)                                                 00978001
00606C 42F0 CDD3            06075  9107=          STC  R15,IUB3+1                                                 00979001
006070 97FF CDD3      06075        9108=          XI   IUB3+1,X'FF'                                               00980001
006074 9400 DA47      00A47        9109=IUB3      NI   RII+1,0                                                    00981001
006078 1BEE                        9110=          SR   R14,R14                                                    00982001
00607A 9107 DA43      00A43        9111=          TM   CII+1,X'07'                                                00983001
00607E 4710 CDE8            0608A  9112=          BO   IUB13                                                      00984001
006082 48E0 DA42            00A42  9113=          LH   R14,CII                                                    00985001
006086 41E0 E001            00001  9114=          LA   R14,1(,R14)                                                00986001
00608A 40E0 DA42            00A42  9115=IUB13     STH  R14,CII                                                    00987001
00608E 4540 CF86            06228  9116=          BAL  R4,I1B13                                                   00988001
                                   9117=*                                                                         00989001
                                   9118=*         REAL-INTEGER POWER                                              00990001
                                   9119=*                                                                         00991001
006092 4530 CE78            0611A  9120=I1B1      BAL  R3,HOB11                                                   00992001
006096 4140 CE18            060BA  9121=          LA   R4,I1C11                                                   00993001
00609A 4530 5CB4            00CFC  9122=          BAL  R3,ROUTIN15             CALL ROUTINE NUMBER 15             00994001
00609E 1BEE                        9123=          SR   R14,R14                                                    00995001
0060A0 43E0 9003            00003  9124=          IC   R14,3(,R9)                                                 00996001
0060A4 88E0 0004            00004  9125=          SRL  R14,4                                                      00997001
0060A8 4540 5B4E            00B96  9126=          BAL  R4,ROUTINE9             CALL ROUTINE NUMBER 9              00998001
0060AC 4540 5AF2            00B3A  9127=          BAL  R4,ROUTINE8             CALL ROUTINE NUMBER 8              00999001
0060B0 D201 DA6A 9003 00A6A 00003  9128=          MVC  WPLACE(2),3(R9)         PREPARE INSTRUCTION                01000001
0060B6 92AA DA72      00A72        9129=          MVI  VPLACE,X'AA'                                               01001001
0060BA 4530 CF2A            061CC  9130=I1C11     BAL  R3,HOD1                                                    01002001
0060BE 58E0 D61C            0061C  9131=          L    R14,LATAB                                                  01003001
0060C2 947F E064      00064        9132=          NI   100(R14),X'7F'                                             01004001
0060C6 4520 55A6            005EE  9133=          BAL  R2,GENTXT6              GENERATE 6 BYTES                   01005001
0060CA 58FC 0064            00064  9134=          L    ENTRY,100(LAT,0)        *** GENERATED CODE ***             01006001
0060CE 05EF                        9135=          BALR R14,ENTRY               *** GENERATED CODE ***             01007001
0060D0 46A0 5060            000A8  9136=          BCT  R10,COMP                                                   01008001
                                   9137=*                                                                         01009001
                                   9138=*         REAL-REAL POWER                                                 01010001
                                   9139=*                                                                         01011001
0060D4 4530 CE78            0611A  9140=HOB1      BAL  R3,HOB11                                                   01012001
0060D8 4140 CE5E            06100  9141=          LA   R4,HOC31                                                   01013001
0060DC 4530 5CB4            00CFC  9142=          BAL  R3,ROUTIN15             CALL ROUTINE NUMBER 15             01014001
0060E0 1BEE                        9143=          SR   R14,R14                                                    01015001
0060E2 43E0 9003            00003  9144=          IC   R14,3(,R9)                                                 01016001
0060E6 88E0 0004            00004  9145=          SRL  R14,4                                                      01017001
0060EA 42E0 DA45            00A45  9146=          STC  R14,CIR+1                                                  01018001
0060EE 4540 5C66            00CAE  9147=          BAL  R4,ROUTIN13             CALL ROUTINE NUMBER 13             01019001
0060F2 4540 5C08            00C50  9148=          BAL  R4,ROUTIN12             CALL ROUTINE NUMBER 12             01020001
0060F6 D201 DA6A 9003 00A6A 00003  9149=          MVC  WPLACE(2),3(R9)         PREPARE INSTRUCTION                01021001
0060FC 92AA DA72      00A72        9150=          MVI  VPLACE,X'AA'                                               01022001
006100 4530 CF2A            061CC  9151=HOC31     BAL  R3,HOD1                                                    01023001
006104 58E0 D61C            0061C  9152=          L    R14,LATAB                                                  01024001
006108 947F E068      00068        9153=          NI   104(R14),X'7F'                                             01025001
00610C 4520 55A6            005EE  9154=          BAL  R2,GENTXT6              GENERATE 6 BYTES                   01026001
006110 58FC 0068            00068  9155=          L    ENTRY,104(LAT,0)        *** GENERATED CODE ***             01027001
006114 05EF                        9156=          BALR R14,ENTRY               *** GENERATED CODE ***             01028001
006116 46A0 5060            000A8  9157=          BCT  R10,COMP                                                   01029001
00611A 9101 DA49      00A49        9158=HOB11     TM   RIR+1,X'01'             FPR0 FREE ?                        01030001
00611E 5030 D5AC            005AC  9159=          ST   R3,RETADR+52                                               01031001
006122 4780 CE88            0612A  9160=          BZ   HOB21                   YES, BRANCH                        01032001
006126 4540 5C64            00CAC  9161=          BAL  R4,ROUTIN14             CALL ROUTINE NUMBER 14             01033001
00612A 9102 DA49      00A49        9162=HOB21     TM   RIR+1,X'02'             FPR2 FREE ?                        01034001
00612E 4780 CE9C            0613E  9163=          BZ   HOB2                                                       01035001
006132 41E0 0002            00002  9164=          LA   R14,2                                                      01036001
006136 4540 5C66            00CAE  9165=          BAL  R4,ROUTIN13             CALL ROUTINE NUMBER 13             01037001
00613A 94FD DA49      00A49        9166=          NI   RIR+1,X'FD'                                                01038001
00613E 9102 DA47      00A47        9167=HOB2      TM   RII+1,X'02'             GPR1 FREE ?                        01039001
006142 4780 CEB0            06152  9168=          BZ   HOB3                    YES, BRANCH                        01040001
006146 41E0 0001            00001  9169=          LA   R14,1                                                      01041001
00614A 4540 5B4E            00B96  9170=          BAL  R4,ROUTINE9             CALL ROUTINE NUMBER 9              01042001
00614E 94FD DA47      00A47        9171=          NI   RII+1,X'FD'                                                01043001
006152 4A70 DA56            00A56  9172=HOB3      AH   R7,ONEENTRY             INCREASE P                         01044001
006156 4070 CF78            0621A  9173=          STH  R7,HOB4+2               PREPARE INSTRUCTION                01045001
00615A 4A70 DA56            00A56  9174=          AH   R7,ONEENTRY             INCREASE P                         01046001
00615E 4070 D5F8            005F8  9175=          STH  R7,WORKPL               CHECK MAX                          01047001
006162 4540 58BA            00902  9176=          BAL  R4,MAXCH                                                   01048001
006166 4B70 DA56            00A56  9177=          SH   R7,ONEENTRY             REDUCE P                           01049001
00616A 4190 9005            00005  9178=          LA   R9,5(,R9)                                                  01050001
00616E 4140 CF0A            061AC  9179=          LA   R4,HOC11                                                   01051001
006172 4530 5CB4            00CFC  9180=          BAL  R3,ROUTIN15                                                01052001
006176 4B70 DA56            00A56  9181=          SH   R7,ONEENTRY                                                01053001
00617A 1BEE                        9182=          SR   R14,R14                                                    01054001
00617C 43E0 9003            00003  9183=          IC   R14,3(,R9)                                                 01055001
006180 88E0 0004            00004  9184=          SRL  R14,4                                                      01056001
006184 4540 5C66            00CAE  9185=          BAL  R4,ROUTIN13             CALL ROUTINE NUMBER 13             01057001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

006188 88E0 0001            00001  9186=         SRL   R14,1                                                 01058001
00618C 41F0 0001            00001  9187=         LA    R15,1                                                 01059001
006190 89F0 E000            00000  9188=         SLL   R15,0(R14)                                            01060001
006194 42F0 D5F8            005F8  9189=         STC   R15,WORKPL                                            01061001
006198 97FF D5F8      005F8        9190=         XI    WORKPL,X'FF'                                          01062001
00619C D400 DA49 D5F8 00A49 005F8  9191=         NC    RIR+1(1),WORKPL                                       01063001
0061A2 D201 DA6A 9003 00A6A 00003  9192=         MVC   WPLACE(2),3(R9)        W = DISPL                      01064001
0061A8 92AA DA72      00A72        9193=         MVI   VPLACE,X'AA'           V = CDSA                       01065001
0061AC D201 CF7C DA6A 0621E 00A6A  9194=HOC11    MVC   HOB5+2(2),WPLACE       PREPARE INSTRUCTION            01066001
0061B2 D100 CF7B DA72 0621D 00A72  9195=         MVN   HOB5+1(1),VPLACE                                      01067001
0061B8 4B90 5170            001B8  9196=         SH    R9,KH5                                                01068001
0061BC 4120 CF76            06218  9197=         LA    R2,HOB4                                               01069001
0061C0 45E0 5588            005D0  9198=         BAL   R14,GENTXTS                                           01070001
0061C4 0008                        9199=         DC    H'8'                   GENERATE 8 BYTES               01071001
                                   9200=*                                                                    01072001
0061C6 5830 D5AC            005AC  9201=         L     R3,RETADR+52                                          01073001
0061CA 07F3                        9202=         BR    R3                                                    01074001
                                   9203=*                                                                    01075001
0061CC D201 CF80 DA6A 06222 00A6A  9204=HOD1     MVC   HOB5+6(2),WPLACE                                      01076001
0061D2 5030 D5AC            005AC  9205=         ST    R3,RETADR+52                                          01077001
0061D6 D100 CF7F DA72 06221 00A72  9206=         MVN   HOB5+5(1),VPLACE                                      01078001
0061DC 4120 CF7E            06220  9207=         LA    R2,HOB4+8                                             01079001
0061E0 45E0 5588            005D0  9208=         BAL   R14,GENTXTS                                           01080001
0061E4 0008                        9209=         DC    H'8'                   GENERATE 8 BYTES               01081001
0061E6 9601 DA49      00A49        9210=         OI    RIR+1,X'01'            SET TO ONE RIR OF FPR0         01082001
0061EA 9200 DA45      00A45        9211=         MVI   CIR+1,0                                               01083001
0061EE 4070 D5F8            005F8  9212=         STH   R7,WORKPL              ADJUST R9 ENTRY                01084001
0061F2 D201 9008 D5F8 00008 005F8  9213=         MVC   8(2,R9),WORKPL                                        01085001
0061F8 4190 9005            00005  9214=         LA    R9,5(,R9)                                             01086001
0061FC 5090 D5E4            005E4  9215=         ST    R9,RUTR                INTRODUCE R9 ADD IN RUTR       01087001
006200 D200 9002 DA5D 00002 00A5D  9216=         MVC   2(1,R9),SPBNST+1       USE R9 ENTRY                   01088001
006206 9630 9001      00001        9217=         OI    1(R9),X'30'                                           01089001
00620A 9490 9000      00000        9218=         NI    0(R9),X'90'                                           01090001
00620E 9688 9000      00000        9219=         OI    0(R9),X'88'                                           01091001
006212 5830 D5AC            005AC  9220=         L     R3,RETADR+52                                          01092001
006216 07F3                        9221=         BR    R3                                                    01093001
                                   9222=*                                                                    01094001
006218 411A 0007            00007  9223=HOB4     LA    R1,7(CDSA,0)           *** GENERATED CODE ***         01095001
00621C 41E0 0000            00000  9224=HOB5     LA    R14,0(0,0)             *** GENERATED CODE ***         01096001
006220 41F0 0000            00000  9225=         LA    BRR,0(0,0)             *** GENERATED CODE ***         01097001
006224 90EF 1000            00000  9226=         STM   R14,BRR,0(R1)          *** GENERATED CODE ***         01098001
006228 5040 CFDE            06280  9227=I1B13    ST    R4,RET69                                              01099001
00622C 9120 9000      00000        9228=         TM    0(R9),X'20'                                           01100001
006230 4710 CF9A            0623C  9229=         BO    I1B14                                                 01101001
006234 91C0 9000      00000        9230=         TM    0(R9),X'C0'                                           01102001
006238 4710 CFCC            0626E  9231=         BO    I1B15                                                 01103001
00623C 9120 9005      00005        9232=I1B14    TM    5(R9),X'20'                                           01104001
006240 4710 CFAA            0624C  9233=         BO    I1B16                                                 01105001
006244 91C0 9005      00005        9234=         TM    5(R9),X'C0'                                           01106001
006248 4710 CFCC            0626E  9235=         BO    I1B15                                                 01107001
00624C 4070 CFE2            06284  9236=I1B16    STH   R7,RET691                                             01108001
006250 D201 D5F8 9008 005F8 00008  9237=         MVC   WORKPL(2),8(R9)                                       01109001
006256 940F D5F8      005F8        9238=         NI    WORKPL,X'0F'                                          01110001
00625A 4870 D5F8            005F8  9239=         LH    R7,WORKPL                                             01111001
00625E 4190 9005            00005  9240=         LA    R9,5(,R9)                                             01112001
006262 4540 545E            004A6  9241=         BAL   R4,TRINRE                                             01113001
006266 4870 CFE2            06284  9242=         LH    R7,RET691                                             01114001
00626A 47F0 CFD4            06276  9243=         B     I1B17                                                 01115001
                                   9244=*                                                                    01116001
00626E 4190 9005            00005  9245=I1B15    LA    R9,5(,R9)                                             01117001
006272 4540 545E            004A6  9246=         BAL   R4,TRINRE                                             01118001
006276 4B90 5170            001B8  9247=I1B17    SH    R9,KH5                                                01119001
00627A 5840 CFDE            06280  9248=         L     R4,RET69                                              01120001
00627E 07F4                        9249=         BR    R4                                                    01121001
                                   9250=*                                                                    01122001
006280 00000000                    9251=RET69    DC    F'0'                                                  01123001
006284 0000                        9252=RET691   DC    H'0'                                                  01124001
                                   9253=*                                                                    01125001
                                   9254=*********************************************************************** 01126001
                                   9255=*                                                                    01127001
                                   9256=*        END OF IEX50006                                             01128001
                                   9257=*                                                                    01129001
                                   9258=*********************************************************************** 01130001
                                   9259=*                                                                    01131001
                                   9260 *                                                                    01937001
                                   9261 *        CHARACTER EQUATES                                           01938001
                                   9262 *                                                                    01939001
                                   9263          IEXCHAR                                                     01940001
                                   9264+*                                                                    01-IEXCH
                                   9265+*        CHARACTER A - Z                                             01-IEXCH
                                   9266+*                                                                    01-IEXCH
                      00040        9267+XFA      EQU   X'40'                                                 02-IEXCG
                      00041        9268+XFB      EQU   X'41'                                                 02-IEXCG
                      00042        9269+XFC      EQU   X'42'                                                 02-IEXCG
                      00043        9270+XFD      EQU   X'43'                                                 02-IEXCG
                      00044        9271+XFE      EQU   X'44'                                                 02-IEXCG
                      00045        9272+XFF      EQU   X'45'                                                 02-IEXCG
                      00046        9273+XFG      EQU   X'46'                                                 02-IEXCG
                      00047        9274+XFH      EQU   X'47'                                                 02-IEXCG
                      00048        9275+XFI      EQU   X'48'                                                 02-IEXCG
                      00049        9276+XFJ      EQU   X'49'                                                 02-IEXCG
                      0004A        9277+XFK      EQU   X'4A'                                                 02-IEXCG
                      0004B        9278+XFL      EQU   X'4B'                                                 02-IEXCG
                      0004C        9279+XFM      EQU   X'4C'                                                 02-IEXCG
                      0004D        9280+XFN      EQU   X'4D'                                                 02-IEXCG
                      0004E        9281+XFO      EQU   X'4E'                                                 02-IEXCG
```

```
  Loc  Object Code      Addr1 Addr2  Stmt    Source Statement                                      X390 3.1.04  2012/08/17 13.13

                        0004F        9282+XFP        EQU    X'4F'                                                    02-IEXCG
                        00050        9283+XFQ        EQU    X'50'                                                    02-IEXCG
                        00051        9284+XFR        EQU    X'51'                                                    02-IEXCG
                        00052        9285+XFS        EQU    X'52'                                                    02-IEXCG
                        00053        9286+XFT        EQU    X'53'                                                    02-IEXCG
                        00054        9287+XFU        EQU    X'54'                                                    02-IEXCG
                        00055        9288+XFV        EQU    X'55'                                                    02-IEXCG
                        00056        9289+XFW        EQU    X'56'                                                    02-IEXCG
                        00057        9290+XFX        EQU    X'57'                                                    02-IEXCG
                        00058        9291+XFY        EQU    X'58'                                                    02-IEXCG
                        00059        9292+XFZ        EQU    X'59'                                                    02-IEXCG
                                     9293+*                                                                          01-IEXCH
                                     9294+*          NATIONAL CHARACTERS                                             01-IEXCH
                                     9295+*                                                                          01-IEXCH
                        0005A        9296+XFDOLLAR EQU    X'5A'                                                      02-IEXCG
                        0005B        9297+XFUNDER  EQU    X'5B'                                                      02-IEXCG
                        0005C        9298+XFHASH   EQU    X'5C'                                                      02-IEXCG
                        0005D        9299+XFAT     EQU    X'5D'                                                      02-IEXCG
                                     9300+*                                                                          01-IEXCH
                                     9301+*          NUMERIC 0 - 9                                                   01-IEXCH
                                     9302+*                                                                          01-IEXCH
                        00030        9303+XF0        EQU    X'30'                                                    02-IEXCG
                        00031        9304+XF1        EQU    X'31'                                                    02-IEXCG
                        00032        9305+XF2        EQU    X'32'                                                    02-IEXCG
                        00033        9306+XF3        EQU    X'33'                                                    02-IEXCG
                        00034        9307+XF4        EQU    X'34'                                                    02-IEXCG
                        00035        9308+XF5        EQU    X'35'                                                    02-IEXCG
                        00036        9309+XF6        EQU    X'36'                                                    02-IEXCG
                        00037        9310+XF7        EQU    X'37'                                                    02-IEXCG
                        00038        9311+XF8        EQU    X'38'                                                    02-IEXCG
                        00039        9312+XF9        EQU    X'39'                                                    02-IEXCG
                                     9313+*                                                                          01-IEXCH
                                     9314+*          SPECIAL CHARS                                                   01-IEXCH
                                     9315+*                                                                          01-IEXCH
                        00000        9316+XFPLUS   EQU    X'00'                                                      02-IEXCG
                        00001        9317+XFMINUS  EQU    X'01'                                                      02-IEXCG
                        00002        9318+XFASTER  EQU    X'02'                                                      02-IEXCG
                        00003        9319+XFSLASH  EQU    X'03'                                                      02-IEXCG
                        00006        9320+XFLBRAC  EQU    X'06'                                                      02-IEXCG
                        00007        9321+XFCOLON  EQU    X'07'                                                      02-IEXCG
                        00008        9322+XFLSQBR  EQU    X'08'                                                      02-IEXCG
                        0000B        9323+XFSCOLON EQU    X'0B'                                                      02-IEXCG
                        00010        9324+XFEQUAL  EQU    X'10'                                                      02-IEXCG
                        00011        9325+XFLT     EQU    X'11'                                                      02-IEXCG
                        00012        9326+XFGT     EQU    X'12'                                                      02-IEXCG
                        00020        9327+XFNOT    EQU    X'20'                                                      02-IEXCG
                        00022        9328+XFOR     EQU    X'22'                                                      02-IEXCG
                        00023        9329+XFAMPER  EQU    X'23'                                                      02-IEXCG
                        00025        9330+XFCOMMA  EQU    X'25'                                                      02-IEXCG
                        00026        9331+XFRBRAC  EQU    X'26'                                                      02-IEXCG
                        00028        9332+XFRSQBR  EQU    X'28'                                                      02-IEXCG
                        0002B        9333+XFBLANK  EQU    X'2B'                                                      02-IEXCG
                        0002D        9334+XFPERIOD EQU    X'2D'                                                      02-IEXCG
                        0002E        9335+XFQUOTE  EQU    X'2E'                                                      02-IEXCG
                                     9336+*                                                                          01-IEXCH
                        0000C        9337+XFDQUOTE EQU    X'0C'                                                      02-IEXCG
                                     9338+*                                                                          01-IEXCH
                        0002C        9339+XFEXCLM  EQU    X'2C'                                                      02-IEXCG
                        0002C        9340+XFPERCT  EQU    X'2C'                                                      02-IEXCG
                                     9341+*                                                                          01-IEXCH
                                     9342+*          INTERNAL CONTROL CODES                                          01-IEXCH
                                     9343+*                                                                          01-IEXCH
                        00005        9344+XFPOWER    EQU    X'05'                                                    01-IEXCH
                        00016        9345+XFASSIGN   EQU    X'16'                                                    01-IEXCH
                        00017        9346+XFGOTO     EQU    X'17'                                                    01-IEXCH
                        00018        9347+XFFOR      EQU    X'18'                                                    01-IEXCH
                        0001D        9348+XFIF       EQU    X'1D'                                                    01-IEXCH
                        00027        9349+XFLABEL    EQU    X'27'                                                    01-IEXCH
                        00029        9350+XFDELTA    EQU    X'29'                                                    01-IEXCH
                        0002C        9351+XFEND      EQU    X'2C'                                                    01-IEXCH
                        0002F        9352+XFZETA     EQU    X'2F'                                                    01-IEXCH
                        0003E        9353+XFDECPT    EQU    X'3E'                                                    01-IEXCH
                                     9354 *                                                                          01941001
                                     9355 *          REGISTER EQUATES                                                01942001
                                     9356 *                                                                          01943001
                                     9357          IEZREGS                                                           01944001
                        00000        9358+R0         EQU    0                                                        01-IEZRE
                        00001        9359+R1         EQU    1                                                        01-IEZRE
                        00002        9360+R2         EQU    2                                                        01-IEZRE
                        00003        9361+R3         EQU    3                                                        01-IEZRE
                        00004        9362+R4         EQU    4                                                        01-IEZRE
                        00005        9363+R5         EQU    5                                                        01-IEZRE
                        00006        9364+R6         EQU    6                                                        01-IEZRE
                        00007        9365+R7         EQU    7                                                        01-IEZRE
                        00008        9366+R8         EQU    8                                                        01-IEZRE
                        00009        9367+R9         EQU    9                                                        01-IEZRE
                        0000A        9368+R10        EQU    10                                                       01-IEZRE
                        0000B        9369+R11        EQU    11                                                       01-IEZRE
                        0000C        9370+R12        EQU    12                                                       01-IEZRE
                        0000D        9371+R13        EQU    13                                                       01-IEZRE
                        0000E        9372+R14        EQU    14                                                       01-IEZRE
                        0000F        9373+R15        EQU    15                                                       01-IEZRE
                                     9374 *                                                                          01945001
                                     9375            END                                                             01946001
```

```
Symbol     Length    Value     Id     Type Asm  Program    Defn  References                   X390 3.1.04  2012/08/17 13.13

ABC1            4 0000004C 00000001  I                     166   170B  181B
ABD1            4 00000068 00000001  I                     175   168B
ABD3            4 00000060 00000001  I                     172   167B  186B
ABD5            4 00000098 00000001  I                     191   187B
ABIG2           4 000055B4 00000001  A A                  8352  8347
ADDHZB1         4 00002FBC 00000001  A A                  4788  4658
ADERE2          4 000035E0 00000001  A A                  5451  5301
ADHEB2          4 000035D8 00000001  A A                  5449  5401
ADHZB1          4 000035DC 00000001  A A                  5450  5426
ADR             1 00000008           U                     127   929  1020M 1030M 1032  1209M 1403  4765M 4773M 4774  4923
                                                                4931M 5052  5069M 5607M 5619M 5641M 5669M 6283M 6431  6548M
                                                                6550B 6709M 7665M 8018M
ADREXC         25 000011F2 00000001  X X                  1949   341
ADRSTC         25 000010AE 00000001  X X                  1910   340
ADRTRANS        4 0000409A 00000001  I                    6404  5867B 5970B 6339B
ADRTR0          4 000040CA 00000001  I                    6416  6411B 6413B
ADRTR1          4 000040E6 00000001  I                    6422  6419M 6420M
ADRTR2          4 000040EE 00000001  I                    6424  6406M
ADRTR3          4 000040F6 00000001  I                    6427  6418B
ADRTR4          4 00004106 00000001  I                    6431  6407M
ADRTR5          6 00004112 00000001  I                    6435  6429B
ADRTR6          6 00004128 00000001  I                    6440  6408M 6435M 6436M 6437M
ADRTR61         4 0000412E 00000001  I                    6441  6433B
ADRTR7          4 00004132 00000001  I                    6442  6425B
ADRTR8          4 0000414A 00000001  I                    6448  6409M 6446M
ADRTR9          4 0000414E 00000001  I                    6449  6443B 6445B
AJMPCP43        4 000035E4 00000001  A A                  5452  5294
ALINDCB         4 00000048 FFFFFFFF  A A                  2005   755
AOPTABE         4 00000618 FFFFFFFF  A A                  2356   277M  310M 2645  3496
APCHDCB         4 00000060 FFFFFFFF  A A                  2011   753   769
API             6 000001CA 00000001  X X                   330  1581  2612  4221  4466  4469  6538  7090  7471  7517  7674
                                                                8024  8456
APIMASK         1 00000010           U                    1735  1739  1794  4916  5082  5368  5375  5379  5386  5476  5478
                                                                7023  7678  7902  8458  8468
ARRAYBD         1 00000208           U                    2535  4670B
ARRAYM          1 00000004           U                     920   992  1007
ARRTESTA        4 00000EE6 00000001  I                    1794  1752B
ARRTESTT        4 00000EFC 00000001  I                    1800  1797B
ARRTEST1        4 00000EE2 00000001  I                    1790  1822B 1826B 3221B 5276B 5917B 7020B 7511B 7585B 7637B 7983B
ARRTEST2        4 00000F2C 00000001  I                    1819  7345B 8146B
ARRTEST3        4 00000F10 00000001  I                    1807  1817B
AUT2DCB         4 00000068 FFFFFFFF  A A                  2013   227
AUT3DCB         4 0000006C FFFFFFFF  A A                  2014   288
AWC2            4 00003374 00000001  I                    5219  5186B
AWC4            4 0000337A 00000001  I                    5224  5231B 5483B
AWD1            4 00003316 00000001  I                    5190  5475B
AWD2            4 00003382 00000001  I                    5227  5191B
AWE45           4 000033A8 00000001  I                    5242  5206M 5207M 5208
AWF2            4 00003390 00000001  I                    5235  5195B
AWJ1            4 00003368 00000001  I                    5215  5193B 5197B 5199B 5225B 5240B
BCB2            4 0000430E 00000001  I                    6663  6660B
BCD2            4 0000432A 00000001  I                    6670  6668M
BEB2            4 000043A2 00000001  I                    6732  6728B
BEE2            4 000043BC 00000001  I                    6738  6733B
BIAE2           4 000034E8 00000001  I                    5366  5334B
BIAH161         4 000034E0 00000001  I                    5363  5352B
BIAH162         4 000034BA 00000001  I                    5354  5364B
BIAH18          4 000034D8 00000001  I                    5360  5355M 5356M 5358M
BIBA1           4 0000352C 00000001  I                    5390  5367B
BIBG1           4 00003548 00000001  I                    5400  5343B 5345B 5395B
BICA1           4 00003556 00000001  I                    5405  5393B
BICA15          2 0000357E 00000001  I                    5415  5413M 5421
BICF1           4 0000359E 00000001  I                    5425  5406B
BIC2            4 000033CC 00000001  I                    5279  2822  5323B 5325B 5328B
BID4            4 00003472 00000001  I                    5330  5284B 5286B
BIE3            4 00003516 00000001  I                    5381  5278B 5333B 5388B
BIE31           4 0000350E 00000001  I                    5379  5331B
BIE32           4 00003520 00000001  I                    5386  5280B
BIE33           4 000034F8 00000001  I                    5370  5377B
BIE34           4 00003502 00000001  I                    5375  5336B
BIE4            4 0000347A 00000001  I                    5332  5282B
BIG2            2 000033EC 00000001  I                    5290  5274  5338B 5361B 5369B 5373B 5376B 5380B 5384B 5387B 5391B
                                                                8352
BIJ2            4 00003404 00000001  I                    5298  5292B
BIK1            4 0000342E 00000001  I                    5313  5306B
BIK2            4 0000341A 00000001  I                    5305  5299B
BIK3            4 00003456 00000001  I                    5322  5318B 5320B
BKB2            4 00003620 00000001  I                    5485  5468B
BKQB1           4 000045E2 00000001  I                    6976  6969B
BNE2            2 00004422 00000001  I                    6797  6899B
BOD1            4 00003644 00000001  I                    5525  5521B
BOE1            4 00003652 00000001  I                    5530  5526B
BOOTYPEM        1 00000003           U                    4596  4687
BOTH            4 00000688 00000001  I                     766   751B
BRR             1 0000000F           U                     134  1022M 1027M 1096M 5060M 5061B 5668M 5669  5670  5738M 6243M
                                                                6245  6247  6670M 6671B 7615M 7616B 7816M 7817  8039M 8040B
                                                                8416M 8417  9088M 9089  9225M 9226
BRRST           1 0000009C           U                    2440  2441
BUC3            4 000043DA 00000001  I                    6760  6774B
BUE3            2 000043E2 00000001  I                    6763  6758B
BUG3            4 00004400 00000001  I                    6772  6759B
BWB2            4 00004576 00000001  I                    6896  6791B
BWF4            4 000044F2 00000001  I                    6854  6818B 6826B
BWF4B           2 00004562 00000001  I                    6890  6840B
BWF4C           2 00004560 00000001  I                    6889  6803B
BWG3            2 00004516 00000001  I                    6867  6837B
BWG31           4 00004528 00000001  I                    6872  6858B 6865B
```

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Symbol    Length    Value     Id    Type Asm  Program   Defn  References                      X390 3.1.04  2012/08/17 13.13

BWG4           4 0000450E 00000001  I                   6864  6838B
BWH3           4 000044FA 00000001  I                   6857  6804B
BWJ3           4 00004568 00000001  I                   6892  6805B
BWJ41          4 00004580 00000001  I                   6901  6806B 6807B 6808B 6809B 6810B 6811B 6812B 6813B 6814B 6815B
                                                              6816B 6817B 6824B 6827B 6828B 6829B 6830B 6831B 6832B 6833B
                                                              6835B 6836B 6839B 6861B
BWK3           2 00004552 00000001  I                   6884  6842B
BWK4           4 000044D6 00000001  I                   6844  6822B
BWK5           2 000044DA 00000001  I                   6845  6821B 6823B
BWK6           2 000044DC 00000001  I                   6846  6841B
BWK7           4 000044EA 00000001  I                   6851  6820B
BWK8           4 000044DE 00000001  I                   6847  6852B
BYB2           4 00000F80 00000001  I                   1857  1854B
BYF1           2 000045A8 00000001  I                   6928  6921B 6923B
BYF2           4 000045BE 00000001  I                   6935  6925B
CAP            4 000008E6 00000001  I                   1027   967M  970M  971M  972
CAP1           1 000000D4           U                   2490  1027B 4001B
CAP2           1 000000D8           U                   2492  5679B
CARDCNT        4 000000B4 FFFFFFFF  P P                 2135   783M  784
CBVTAB        48 00000A78 FFFFFFFF  C C                 2401  3358  3503  3918M 3921M 3922M 3925M 3926M 3935M 3943  3965
                                                              3973  3978M 4518
CDSA           1 0000000A           U                    128  1030  1391  1403  1513  4643  4711  4756  4758  4766  4769
                                                              4771  4772  4774  4775  4777  4779  4938  5242  5967  6021
                                                              6032  6395  6424  6431  7436  7458  7531  7546  7559  7712
                                                              7730  8059  8073  8356  8415  8418  8569  9086  9223
CEB2           4 000045FE 00000001  I                   7000  6994B
CFSN           1 00000A52 FFFFFFFF  X X                 2375  2586  2589M
CII            2 00000A42 FFFFFFFF  H H                 2367   885M  886M 1296  1298  1300M 1326  1333  1336M 1343M 3393M
                                                              5314M 5443  7753M 7887M 8739M 8836  8838  8841  8844M 8877
                                                              8880  8953  8979  8981  8984  9006  9008  9074M 9111  9113
                                                              9115M
CIR            2 00000A44 FFFFFFFF  H H                 2368   564M  868M  869M 1422  1424  1426M 1453  1462  1465M 1472M
                                                              1473  6345M 7743M 7799M 8494M 9146M 9211M
CKD1           4 000032EE 00000001  I                   5144  5139B
CLEARDIS       2 00000A54 FFFFFFFF  X X                 2377  4175  4749
CLEARRG        4 0000074E 00000001  I                    851   945B  963B 1617B 1682B 2636B 3803B 3827B 4034B 4301B 5151B
                                                              5589B 6386B 6441B 6545B 7931B
CLFPR          2 0000539A 00000001  I                   8208  8169B 8177B 8194B
COMP           2 000000A8 00000001  I                    200   173B 3910B 4018B 4624B 5081B 5259B 5309B 5505B 5530B 5548B
                                                              6613B 6740B 6761B 6766B 6770B 6773B 6802B 6819B 6825B 6834B
                                                              6849B 6855B 6862B 6873B 6877B 6880B 6882B 6887B 6894B 6998B
                                                              7003B 7025B 7043B 7091B 7219B 7379B 7518B 7533B 7675B 7706B
                                                              8381B 8457B 9085B 9136B 9157B
COMPFLGS       4 00000080 FFFFFFFF  X X                 2058   165M  175M  449M  468   721   723   750   752  1093  1397
                                                              1615  1647  1842  1849M 1853  1856M 2572  2619  2701  2837
                                                              2961  3130  3229  3332  3334  3779  3801  3821  3823  3851
                                                              3853  3870  3904  3908M 4027  4032  4050  4054M 4058  4071
                                                              4107  4123  4149  4200  4208M 4222  4224M 4231  4247  4256M
                                                              4259  4278  4341  4377  4387  4486  4539M 4614M 4631  4666
                                                              4858  4883  4893M 4920  5049  5079M 5138  5149  5185  5198
                                                              5281  5307M 5337  5390  5467  5520  5524M 5572  5579  5712
                                                              5803M 5819M 5865  5883  5891M 5946  6152M 6155  6178M 6493
                                                              6543  6570  6659  6665  6727  6731M 6732  6790  6796M 6968
                                                              6993  7026  7111  7135  7172  7258  7288  7317  7350  7519
                                                              7598  7645  7686  7756  7919  7929  7947  7984  8144  8151
                                                              8455M
COMPMODE       1 00000080           U                   2062   449   723  1615  1647  2619  2701  2837  2961  3229  3334
                                                              3801  3823  3904  4032  4058  4071  4149  4200  4222  4231
                                                              4247  4341  4486  4631  4920  5049  5149  5198  5281  5337
                                                              5390  5579  5712  5865  5883  5946  6152  6155  6543  6570
                                                              6665  6732  7026  7350  7519  7598  7645  7686  7756  7929
                                                              7984  8151
CPEND          4 00000432 00000001  I                    468  3858B
CPEND1         4 0000043E 00000001  I                    471   469B
CPEND2         2 0000044A 00000001  H H                  476   472B
CPERR1         4 00000462 00000001  I                    486   152   447B  464B 6629B
CPERR10        4 00000478 00000001  I                    495   487B
CPERR11        2 0000048E 00000001  H H                  505   496B
CP0            4 0000233E 00000001  I                   3779   350  3778U
CP0A           4 00002354 00000001  I                   3786  3797B
CP0B           4 00002358 00000001  I                   3787  3800B 3802B 3809B
CP0C           4 0000236E 00000001  I                   3794  3782B
CP0D           4 00002378 00000001  I                   3799  3780B
CP0E           4 000023A0 00000001  I                   3811  3804M 3805
CP1            4 000023A8 00000001  I                   3821   350  3820U
CP1A           4 000023F4 00000001  I                   3841  3822B 3826B
CP1B           4 000023D6 00000001  I                   3832  3824B
CP1C           4 000023EE 00000001  I                   3838  3833B 3835B
CP12           4 0000330E 00000001  I                   5185   353  5184U 5475B 5483B
CP16           4 00002646 00000001  I                   4050   354  4049U
CP16A          4 0000265A 00000001  I                   4055  4051B
CP16B          4 00002666 00000001  I                   4058  4056B
CP16C          4 00002686 00000001  I                   4067  4059B
CP16D          4 000026E6 00000001  I                   4091  4061B
CP16E          4 000026F6 00000001  I                   4096  4063B
CP16F          4 000026D2 00000001  I                   4086  4068B 4094B
CP16G          4 000026AE 00000001  I                   4077  4070B 4072B
CP16H          4 000026B6 00000001  I                   4079  4098B
CP16I          4 000026C2 00000001  I                   4082  4080B
CP17           4 000042FE 00000001  I                   6659   354  6658U
CP18           4 0000438E 00000001  I                   6727   354  6726U
CP19           4 000033B0 00000001  I                   5258   354  5257U
CP20           4 000033B8 00000001  I                   5274   355  5273U
CP21           4 000035E8 00000001  I                   5467   355  5466U
CP22           4 00003628 00000001  I                   5504   355  5503U
CP23           4 00003630 00000001  I                   5520   355  5519U
CP24           4 00002702 00000001  I                   4107   356  4106U
```

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| CP24A | 4 | 00002714 | 00000001 | I | | | 4113 | 4108B |
| CP25 | 4 | 0000271A | 00000001 | I | | | 4123 | 356 4122U |
| CP25A | 4 | 0000272A | 00000001 | I | | | 4127 | 4124B |
| CP26 | 4 | 000043C8 | 00000001 | I | | | 6755 | 356 6754U |
| CP27 | 4 | 0000440C | 00000001 | I | | | 6790 | 356 6789U |
| CP28 | 4 | 00004586 | 00000001 | I | | | 6918 | 357 6917U |
| CP29 | 4 | 000045C4 | 00000001 | I | | | 6951 | 357 6950U |
| CP3 | 4 | 000023FA | 00000001 | I | | | 3851 | 350 3850U |
| CP3A | 4 | 00002416 | 00000001 | I | | | 3860 | 3852B |
| CP3B | 4 | 00002412 | 00000001 | I | | | 3858 | 3854B |
| CP30 | 4 | 000045CE | 00000001 | I | | | 6968 | 357 6967U |
| CP31 | 4 | 000045E8 | 00000001 | I | | | 6992 | 357 6991U |
| CP33 | 4 | 00003656 | 00000001 | I | | | 5547 | 358 5546U |
| CP34 | 4 | 000032DC | 00000001 | I | | | 5138 | 358 5137U |
| CP36 | 4 | 0000273A | 00000001 | I | | | 4139 | 359 4138U |
| CP36A | 4 | 0000274A | 00000001 | I | | | 4144 | 4139 4150B 4169B |
| CP36B | 4 | 0000275A | 00000001 | I | | | 4149 | 4142B |
| CP36C | 4 | 000027AA | 00000001 | I | | | 4171 | 4153B |
| CP36D | 4 | 0000277C | 00000001 | I | | | 4157 | 4155M |
| CP36E | 4 | 00002796 | 00000001 | I | | | 4165 | 4158B 4174B 4181B |
| CP36F | 2 | 00002784 | 00000001 | I | | | 4160 | 4171 |
| CP36G | 6 | 000027D6 | 00000001 | I | | | 4180 | 4175M 4176M 4177M 4178M |
| CP38 | 4 | 000027E0 | 00000001 | I | | | 4190 | 359 4189U |
| CP38A | 4 | 00002860 | 00000001 | I | | | 4224 | 4190 4195B 4279B 4290B 4298B |
| CP38AA | 4 | 00002B28 | 00000001 | I | | | 4422 | 4307M 4310 |
| CP38AB | 4 | 00002B2C | 00000001 | I | | | 4423 | 4308M 4309M |
| CP38AC | 4 | 000029D4 | 00000001 | I | | | 4329 | 4324M |
| CP38AD | 4 | 000029E8 | 00000001 | I | | | 4334 | 4325M |
| CP38AE | 4 | 00002B30 | 00000001 | I | | | 4424 | 4335 |
| CP38AF | 4 | 00002B46 | 00000001 | I | | | 4430 | 4343M 4344 |
| CP38AG | 4 | 00002B34 | 00000001 | I | | | 4425 | 4352M 4359M 4362 4386 |
| CP38AH | 2 | 00002B1A | 00000001 | I | | | 4417 | 4358 4415M |
| CP38AHA | 6 | 00002A42 | 00000001 | I | | | 4359 | 4357B |
| CP38AI | 4 | 00002B3C | 00000001 | I | | | 4427 | 4354M 4360M |
| CP38AK | 4 | 00002AA4 | 00000001 | I | | | 4384 | 4363B |
| CP38AL | 4 | 00002AAC | 00000001 | I | | | 4386 | 4361B 4372B |
| CP38AM | 4 | 00002A7C | 00000001 | I | | | 4374 | 4370B |
| CP38AN | 2 | 00002B44 | 00000001 | I | | | 4429 | 4376M 4383 |
| CP38AO | 4 | 00002A9A | 00000001 | I | | | 4382 | 4378B |
| CP38AP | 2 | 00002A98 | 00000001 | I | | | 4381 | 4379M |
| CP38B | 4 | 000027F0 | 00000001 | I | | | 4194 | 4193B |
| CP38BA | 4 | 00002ABE | 00000001 | I | | | 4392 | 4388B |
| CP38C | 4 | 00002858 | 00000001 | I | | | 4222 | 4197B |
| CP38D | 4 | 00002968 | 00000001 | I | | | 4300 | 4201B |
| CP38E | 6 | 000029A2 | 00000001 | I | | | 4316 | 4202B 4339B |
| CP38F | 4 | 0000284C | 00000001 | I | | | 4218 | 4199B |
| CP38G | 4 | 00002814 | 00000001 | I | | | 4204 | 4233B 4240B 4342B |
| CP38H | 4 | 00002820 | 00000001 | I | | | 4207 | 4236B 4320B 4394B |
| CP38J | 4 | 000028D2 | 00000001 | I | | | 4259 | 4223B |
| CP38K | 4 | 0000289C | 00000001 | I | | | 4242 | 4226B |
| CP38L | 4 | 000029FA | 00000001 | I | | | 4341 | 4228B |
| CP38M | 4 | 0000288A | 00000001 | I | | | 4235 | 4230B |
| CP38N | 4 | 00002A1A | 00000001 | I | | | 4350 | 4232B |
| CP38O | 4 | 000028DE | 00000001 | I | | | 4262 | 4260B |
| CP38P | 4 | 00002ACC | 00000001 | I | | | 4396 | 4261B 4300B |
| CP38Q | 4 | 000028F2 | 00000001 | I | | | 4268 | 4264B |
| CP38R | 4 | 00002906 | 00000001 | I | | | 4273 | 4266B |
| CP38S | 4 | 00002932 | 00000001 | I | | | 4284 | 4281M 4282M |
| CP38T | 6 | 0000294E | 00000001 | I | | | 4292 | 4286B |
| CP38U | 2 | 00002948 | 00000001 | I | | | 4289 | 4287M |
| CP38V | 4 | 00002B20 | 00000001 | I | | | 4420 | 4292M 4294 |
| CP38W | 4 | 00002B24 | 00000001 | I | | | 4421 | 4293M |
| CP38X | 2 | 000029BA | 00000001 | I | | | 4322 | 4303B |
| CP38YA | 2 | 00002B4E | 00000001 | X | X | | 4432 | 4316 |
| CP38YB | 2 | 00002ABC | 00000001 | H | H | | 4390 | 4382M 4392M |
| CP38YD | 4 | 00002B50 | 00000001 | F | F | | 4433 | 4396M 4403 |
| CP38YE | 4 | 00002AEC | 00000001 | I | | | 4406 | 4399B |
| CP38YF | 4 | 00002AE6 | 00000001 | I | | | 4403 | 4412B 4418B |
| CP38YG | 4 | 00002B0C | 00000001 | I | | | 4414 | 4406 |
| CP38YH | 4 | 00002B04 | 00000001 | I | | | 4411 | 4408M 4409M |
| CP4 | 4 | 0000241C | 00000001 | I | | | 3870 | 351 3869U |
| CP4A | 4 | 0000242E | 00000001 | I | | | 3876 | 3871B |
| CP4B | 4 | 000025EA | 00000001 | I | | | 3996 | 3879B |
| CP4C | 4 | 00002468 | 00000001 | I | | | 3891 | 3883B |
| CP4D | 4 | 00002462 | 00000001 | I | | | 3888 | 3885M 3886 |
| CP4E | 4 | 000025B4 | 00000001 | I | | | 3980 | 3894B 3911B 3914B |
| CP4F | 4 | 000024B0 | 00000001 | I | | | 3908 | 3905B 3942B |
| CP4G | 4 | 000024C4 | 00000001 | I | | | 3914 | 3907B 3931B |
| CP4H | 4 | 000024B4 | 00000001 | I | | | 3909 | 3912B |
| CP4I | 2 | 000024D2 | 00000001 | X | X | | 3917 | 3915M |
| CP4J | 6 | 000024F6 | 00000001 | I | | | 3926 | 3920B 3924B 3936B |
| CP4K | 4 | 00002520 | 00000001 | I | | | 3938 | 3934B 3979B |
| CP4L | 6 | 000025AA | 00000001 | I | | | 3978 | 3944B 3971B |
| CP4M | 4 | 0000255A | 00000001 | I | | | 3953 | 3951B |
| CP4N | 4 | 00002600 | 00000001 | I | | | 4004 | 3956M |
| CP4P | 4 | 000025F0 | 00000001 | I | | | 3999 | 3958M 3967 |
| CP4Q | 4 | 000025F4 | 00000001 | I | | | 4000 | 3960M |
| CP4R | 4 | 000025F8 | 00000001 | I | | | 4001 | 3961 |
| CP4S | 6 | 0000259A | 00000001 | I | | | 3973 | 3966B |
| CP4T | 4 | 00002604 | 00000001 | I | | | 4005 | 3974 |
| CP4U | 4 | 000025E0 | 00000001 | I | | | 3992 | 3983B |
| CP4V | 4 | 000025BE | 00000001 | I | | | 3982 | 3986B 3990B |
| CP4W | 6 | 000025D2 | 00000001 | I | | | 3988 | 3984B |
| CP4ZA | 2 | 000025FC | 00000001 | X | X | | 4002 | 3947M |
| CP4ZB | 2 | 000025FE | 00000001 | X | X | | 4003 | 3948M |
| CP4ZC | 2 | 00002608 | 00000001 | X | X | | 4006 | 3957M |
| CP4ZF | 2 | 0000260A | 00000001 | X | X | | 4007 | 3973M |

X390 3.1.04 2012/08/17 13.13

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| CP40 | 4 | 00001392 | 00000001 | I | | | 2600 | 360 |
| CP40A | 4 | 000013CE | 00000001 | I | | | 2617 | 2601 2614B |
| CP40B | 4 | 000013B6 | 00000001 | I | | | 2609 | 2604B |
| CP40C | 4 | 000013C2 | 00000001 | I | | | 2613 | 2606B 2608B |
| CP40E | 6 | 000013BC | 00000001 | I | | | 2612 | 2615B |
| CP40F | 4 | 00001416 | 00000001 | I | | | 2636 | 2622B 2624B |
| CP40G | 4 | 000014D4 | 00000001 | I | | | 2685 | 2628M 2629M 2630 |
| CP40H | 4 | 00001EF0 | 00000001 | I | | | 3448 | 2637B 2639B 2776B 2854B 3191B 3197B 3203B 3308B |
| CP40J | 4 | 000014CA | 00000001 | I | | | 2681 | 2644B 2677B |
| CP40K | 4 | 0000143E | 00000001 | I | | | 2645 | 2650B |
| CP40L | 4 | 00001458 | 00000001 | I | | | 2652 | 2648B |
| CP40M | 4 | 0000146A | 00000001 | I | | | 2656 | 2647B |
| CP40Q | 4 | 000021B8 | 00000001 | I | | | 3648 | 2655B 3601B |
| CP40R | 4 | 00001476 | 00000001 | I | | | 2660 | 2657B |
| CP40S | 4 | 000014A0 | 00000001 | I | | | 2670 | 2658B |
| CP40T | 4 | 000014C2 | 00000001 | I | | | 2679 | 2663B |
| CP40U | 4 | 0000148E | 00000001 | I | | | 2666 | 2664B |
| CP40V | 6 | 00001492 | 00000001 | I | | | 2667 | 2679X |
| CP40W | 4 | 000014BA | 00000001 | I | | | 2676 | 2668B 2671B |
| CP40X | 6 | 00001F14 | 00000001 | I | | | 3459 | 2675B 2739B 3259B |
| CP41 | 4 | 00002B54 | 00000001 | I | | | 4442 | 360 4441U |
| CP41A | 6 | 00002B64 | 00000001 | I | | | 4446 | 4442 4470B |
| CP41B | 4 | 00002BC4 | 00000001 | I | | | 4472 | 4445B |
| CP41C | 4 | 00002BA2 | 00000001 | I | | | 4460 | 4446M |
| CP41D | 4 | 00002BCE | 00000001 | I | | | 4477 | 4455B 4457B |
| CP41E | 4 | 00002B9E | 00000001 | I | | | 4459 | 4462B |
| CP41G | 6 | 00002BBA | 00000001 | I | | | 4469 | 4475B |
| CP41H | 4 | 00002C1C | 00000001 | I | | | 4497 | 4490B |
| CP41I | 4 | 00002C34 | 00000001 | I | | | 4504 | 4498B |
| CP41J | 4 | 00002C38 | 00000001 | I | | | 4505 | 4502B |
| CP41K | 4 | 00002D22 | 00000001 | I | | | 4563 | 4509M 4511 4547 4556M 4557M 4561M |
| CP41L | 2 | 00002D36 | 00000001 | X | X | | 4569 | 4513 |
| CP41M | 4 | 00002D14 | 00000001 | I | | | 4560 | 4517B |
| CP41N | 6 | 00002CAA | 00000001 | I | | | 4533 | 4524B |
| CP41P | 4 | 00002C82 | 00000001 | I | | | 4522 | 4534B |
| CP41Q | 4 | 00002D30 | 00000001 | F | F | | 4567 | 4525M 4552M 4555 |
| CP41R | 6 | 00002CCA | 00000001 | I | | | 4540 | 4538B |
| CP41S | 4 | 00002D00 | 00000001 | I | | | 4555 | 4531B |
| CP41U | 4 | 00002CF6 | 00000001 | I | | | 4552 | 4543B |
| CP41V | 2 | 00002CF2 | 00000001 | I | | | 4549 | 4546M 4547M |
| CP41W | 2 | 00002D34 | 00000001 | X | X | | 4568 | 4561 |
| CP41X | 4 | 00002D1E | 00000001 | I | | | 4562 | 4558B |
| CP41Z | 6 | 00002D28 | 00000001 | X | X | | 4566 | 4459 |
| CP43 | 4 | 000014DC | 00000001 | I | | | 2694 | 360 |
| CP43A | 4 | 00001E9C | 00000001 | I | | | 3422 | 2695 2699B 2702B |
| CP43B | 4 | 000014F4 | 00000001 | I | | | 2701 | 2698B |
| CP43C | 4 | 00001510 | 00000001 | I | | | 2709 | 2706B 2812B |
| CP43D | 4 | 0000167C | 00000001 | I | | | 2811 | 2708B |
| CP43E | 4 | 000016A0 | 00000001 | A | A | | 2822 | 2709 |
| CP43F | 4 | 00001532 | 00000001 | I | | | 2719 | 2717B 2815B |
| CP43G | 4 | 00001622 | 00000001 | I | | | 2788 | 2720B |
| CP43H | 4 | 000015C4 | 00000001 | I | | | 2762 | 2722B |
| CP43I | 4 | 00001558 | 00000001 | I | | | 2728 | 2726M |
| CP43J | 4 | 000015A4 | 00000001 | I | | | 2751 | 2730B |
| CP43K | 4 | 0000158C | 00000001 | I | | | 2743 | 2731B 2756B 2785B 2801B |
| CP43L | 2 | 00001692 | 00000001 | I | | | 2817 | 2733 |
| CP43L1 | 4 | 00001698 | 00000001 | I | | | 2819 | 2732M |
| CP43M | 4 | 00001584 | 00000001 | I | | | 2740 | 2738B |
| CP43N | 4 | 00001EAE | 00000001 | I | | | 3428 | 2741B 2760B 2763B 2770B 2786B 2791B 2795B 3423B |
| CP43P | 4 | 000015EE | 00000001 | I | | | 2776 | 2724B |
| CP43Q | 4 | 0000159E | 00000001 | I | | | 2748 | 2745M |
| CP43R | 4 | 000015BA | 00000001 | I | | | 2758 | 2751 |
| CP43S | 4 | 000015A8 | 00000001 | I | | | 2752 | 2800B |
| CP43T | 4 | 000015EA | 00000001 | I | | | 2774 | 2764M |
| CP43U | 2 | 000015E4 | 00000001 | I | | | 2772 | 2765 |
| CP43V | 6 | 00001614 | 00000001 | I | | | 2784 | 2779M 2780M 2781M 2782M |
| CP43W | 4 | 00001644 | 00000001 | I | | | 2797 | 2789B |
| CP43X | 4 | 00001B4C | 00000001 | I | | | 3170 | 2799 3162B |
| CP43Y | 6 | 00001F04 | 00000001 | I | | | 3454 | 2802B 3170B 3251B 3279B 3404B |
| CP43Z | 6 | 00001672 | 00000001 | I | | | 2808 | 2803M 2804M 2805M 2806M |
| CP45 | 4 | 000016A4 | 00000001 | I | | | 2830 | 361 |
| CP45A | 2 | 00001ECE | 00000001 | I | | | 3438 | 2831 2835B 2838B 2841B 2889B 2931B 2936B |
| CP45B | 4 | 000016BC | 00000001 | I | | | 2837 | 2834B |
| CP45C | 4 | 000017BC | 00000001 | I | | | 2903 | 2843B |
| CP45D | 4 | 00001F70 | 00000001 | I | | | 3484 | 2844B 2903B 2985B 3000B 3020B 3038B 3110B 3123B 3140B 3148B 3232B |
| CP45F | 2 | 000016EC | 00000001 | I | | | 2849 | 2847M |
| CP45G | 6 | 000016EE | 00000001 | I | | | 2850 | 2909B |
| CP45H | 4 | 00001836 | 00000001 | I | | | 2943 | 2850M |
| CP45I | 4 | 0000183A | 00000001 | I | | | 2944 | 2856M |
| CP45J | 4 | 0000183E | 00000001 | I | | | 2945 | 2857M 2858M |
| CP45K | 4 | 000017D6 | 00000001 | I | | | 2911 | 2852B |
| CP45L | 2 | 00001828 | 00000001 | I | | | 2938 | 2859 2922 |
| CP45M | 4 | 00001722 | 00000001 | I | | | 2863 | 2920B 2926B |
| CP45N | 4 | 0000173A | 00000001 | I | | | 2869 | 2864B |
| CP45P | 4 | 00001796 | 00000001 | I | | | 2893 | 2866B |
| CP45Q | 4 | 0000178E | 00000001 | I | | | 2891 | 2870B |
| CP45R | 6 | 00001804 | 00000001 | I | | | 2928 | 2872B |
| CP45S | 4 | 0000174A | 00000001 | I | | | 2873 | 3084B |
| CP45T | 4 | 00001F34 | 00000001 | I | | | 3467 | 2873B 2895B 2979B 3013B 3060B 3086B |
| CP45U | 4 | 00001752 | 00000001 | I | | | 2875 | 2876 |
| CP45V | 4 | 00001760 | 00000001 | I | | | 2878 | 2876M |
| CP45W | 4 | 00001764 | 00000001 | I | | | 2879 | 2901B |
| CP45X | 4 | 000018B2 | 00000001 | I | | | 2982 | 2880B |
| CP45XA | 4 | 00001776 | 00000001 | I | | | 2883 | 2881M |
| CP45XB | 4 | 00001EE2 | 00000001 | I | | | 3444 | 2887B 3175B 3292B |
| CP45XC | 6 | 00001816 | 00000001 | I | | | 2933 | 2894B |

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| CP45XD | 4 | 0000179E | 00000001 | I | | | 2895 | 3079B |
| CP45XF | 4 | 000017A6 | 00000001 | I | | | 2897 | 2898 |
| CP45XG | 4 | 000017B4 | 00000001 | I | | | 2900 | 2898M |
| CP45XH | 2 | 000017D0 | 00000001 | I | | | 2908 | 2906M |
| CP45XI | 4 | 000017F6 | 00000001 | I | | | 2922 | 2912B |
| CP45XJ | 4 | 00001832 | 00000001 | I | | | 2942 | 2916 |
| CP45XK | 4 | 0000180E | 00000001 | I | | | 2930 | 2928M |
| CP45XL | 4 | 00001820 | 00000001 | I | | | 2935 | 2933M |
| CP47 | 4 | 00001844 | 00000001 | I | | | 2954 | 361 |
| CP47A | 4 | 00001EA4 | 00000001 | I | | | 3425 | 2955 2959B 2962B |
| CP47B | 4 | 0000185C | 00000001 | I | | | 2961 | 2958B |
| CP47C | 4 | 00001A9A | 00000001 | I | | | 3120 | 2964B |
| CP47D | 4 | 00001892 | 00000001 | I | | | 2974 | 2967B 2969B |
| CP47E | 4 | 0000188E | 00000001 | I | | | 2973 | 2970M 2971M |
| CP47F | 6 | 00001950 | 00000001 | I | | | 3029 | 2975B |
| CP47G | 4 | 0000191A | 00000001 | I | | | 3013 | 2978B |
| CP47GA | 4 | 000018EA | 00000001 | I | | | 2998 | 2984B |
| CP47H | 6 | 000018D4 | 00000001 | I | | | 2992 | 2988B 3011B 3023B 3027B 3113B |
| CP47I | 4 | 000018DE | 00000001 | I | | | 2994 | 2992M |
| CP47J | 4 | 00001C20 | 00000001 | I | | | 3235 | 2996B |
| CP47K | 4 | 00001A6C | 00000001 | I | | | 3106 | 2999B |
| CP47L | 4 | 00001908 | 00000001 | I | | | 3007 | 3003B |
| CP47M | 4 | 00001936 | 00000001 | I | | | 3020 | 3018B |
| CP47N | 4 | 0000199E | 00000001 | I | | | 3052 | 3029M 3031 3032M 3049M 3054 3091 3100 |
| CP47P | 4 | 00001976 | 00000001 | I | | | 3038 | 3034B 3036B |
| CP47Q | 4 | 00001A44 | 00000001 | I | | | 3096 | 3039B |
| CP47R | 2 | 00001980 | 00000001 | X | X | | 3042 | 3099 |
| CP47S | 4 | 0000198C | 00000001 | I | | | 3048 | 3044B |
| CP47T | 6 | 00001A32 | 00000001 | I | | | 3091 | 3050B |
| CP47U | 4 | 000019A2 | 00000001 | I | | | 3053 | 3094B 3104B |
| CP47V | 4 | 00001A22 | 00000001 | I | | | 3086 | 3059B |
| CP47W | 4 | 000019CE | 00000001 | I | | | 3063 | 3089B |
| CP47Y | 4 | 000019E2 | 00000001 | I | | | 3068 | 3065B |
| CP47YA | 4 | 00001B70 | 00000001 | I | | | 3178 | 3176M |
| CP47YB | 2 | 00001E9A | 00000001 | X | X | | 3421 | 3184 |
| CP47YC | 2 | 00002014 | 00000001 | X | X | | 3527 | 3189M 3295M 3576 3593 3597M 3604 3610 3617 3626 |
| CP47YD | 4 | 00001F9A | 00000001 | I | | | 3495 | 3190B 3296B |
| CP47YE | 4 | 00001BA4 | 00000001 | I | | | 3191 | 3635B |
| CP47YF | 6 | 00001EDC | 00000001 | I | | | 3443 | 3192B 3204B 3316B |
| CP47YG | 4 | 00001BAC | 00000001 | I | | | 3193 | 3210B |
| CP47YH | 4 | 00001BB8 | 00000001 | I | | | 3197 | 3634B |
| CP47YI | 4 | 00001BC4 | 00000001 | I | | | 3200 | 3198M 3208 |
| CP47YJ | 6 | 00002282 | 00000001 | I | | | 3701 | 3205B 3314B |
| CP47YK | 4 | 00001BD6 | 00000001 | I | | | 3207 | 3735B |
| CP47ZA | 4 | 00001A96 | 00000001 | I | | | 3118 | 3069M |
| CP47ZB | 2 | 00001A8C | 00000001 | I | | | 3115 | 3068 |
| CP47ZC | 4 | 00001A92 | 00000001 | I | | | 3117 | 3070M |
| CP47ZD | 6 | 00001A10 | 00000001 | I | | | 3081 | 3075B |
| CP47ZE | 4 | 00001A08 | 00000001 | I | | | 3078 | 3076M |
| CP47ZF | 4 | 00001A1A | 00000001 | I | | | 3083 | 3081M |
| CP47ZG | 4 | 00001A16 | 00000001 | I | | | 3082 | 3745M |
| CP47ZH | 4 | 00001A3C | 00000001 | I | | | 3093 | 3091M |
| CP47ZI | 6 | 00001A62 | 00000001 | I | | | 3103 | 3098M 3099M 3100M 3101M |
| CP47ZJ | 4 | 00001A7C | 00000001 | I | | | 3110 | 3107B |
| CP47ZK | 4 | 00001AAE | 00000001 | I | | | 3125 | 3121M |
| CP47ZL | 2 | 00001ABA | 00000001 | I | | | 3129 | 3122M 3155 |
| CP47ZM | 4 | 00001AB6 | 00000001 | I | | | 3128 | 3126B |
| CP47ZN | 4 | 00001ACC | 00000001 | I | | | 3134 | 3131B |
| CP47ZP | 4 | 00001AE2 | 00000001 | I | | | 3139 | 3135B |
| CP47ZQ | 4 | 00001ADE | 00000001 | I | | | 3138 | 3136M |
| CP47ZR | 4 | 00001AFC | 00000001 | I | | | 3147 | 3143B |
| CP47ZS | 6 | 00001B16 | 00000001 | I | | | 3155 | 3151B |
| CP47ZT | 2 | 00001B24 | 00000001 | I | | | 3158 | 3155M |
| CP47ZU | 4 | 00001B42 | 00000001 | I | | | 3166 | 3164M |
| CP47ZV | 4 | 00001B58 | 00000001 | I | | | 3173 | 3171M |
| CP47ZW | 2 | 00001EAC | 00000001 | I | | | 3427 | 3168B 3180B 3195B 3262B 3294B 3306B 3317B |
| CP49 | 4 | 00001BE6 | 00000001 | I | | | 3218 | 362 |
| CP49_X | 6 | 00001CE0 | 00000001 | I | | | 3291 | 2809B 3257B 3287B |
| CP49A | 4 | 00001EA8 | 00000001 | I | | | 3426 | 3219 3227B 3230B |
| CP49B | 4 | 00001C08 | 00000001 | I | | | 3229 | 3223B |
| CP49C | 4 | 00001C82 | 00000001 | I | | | 3264 | 3237B |
| CP49D | 4 | 00001C36 | 00000001 | I | | | 3240 | 3238M |
| CP49E | 4 | 00001C4E | 00000001 | I | | | 3247 | 3242B |
| CP49F | 4 | 00001C54 | 00000001 | I | | | 3249 | 3245B |
| CP49G | 4 | 00001C68 | 00000001 | I | | | 3254 | 3252M |
| CP49H | 4 | 00001C72 | 00000001 | I | | | 3259 | 3250B |
| CP49I | 4 | 00001C76 | 00000001 | I | | | 3260 | 3277B |
| CP49J | 4 | 00001CB6 | 00000001 | I | | | 3279 | 3265B |
| CP49K | 4 | 00001C94 | 00000001 | I | | | 3268 | 3266M |
| CP49L | 4 | 00001CAC | 00000001 | I | | | 3275 | 3270B |
| CP49M | 4 | 00001CB2 | 00000001 | I | | | 3277 | 3273B |
| CP49N | 4 | 00001CC2 | 00000001 | I | | | 3282 | 3280M |
| CP49P | 4 | 00001CDA | 00000001 | I | | | 3289 | 3284B |
| CP49Q | 6 | 00001CFA | 00000001 | I | | | 3298 | 3632B |
| CP49R | 4 | 00001D3E | 00000001 | I | | | 3321 | 3298M |
| CP49S | 2 | 00001D38 | 00000001 | I | | | 3319 | 3299 |
| CP49T | 4 | 00001D1A | 00000001 | I | | | 3308 | 3301B |
| CP49U | 4 | 00001D3A | 00000001 | I | | | 3320 | 3302M 3310M |
| CP49V | 4 | 00001D42 | 00000001 | I | | | 3322 | 3309M |
| CP49W | 4 | 00001D30 | 00000001 | I | | | 3316 | 3736B |
| CP51 | 4 | 00002D38 | 00000001 | I | | | 4600 | 362 4599U |
| CP52 | 4 | 00002FC0 | 00000001 | I | | | 4803 | 363 4802U |
| CP54 | 4 | 00003038 | 00000001 | I | | | 4858 | 363 4857U |
| CP56 | 4 | 0000305A | 00000001 | I | | | 4883 | 364 4882U |
| CP57 | 4 | 0000365E | 00000001 | I | | | 5572 | 364 5571U 5799U 5820B |
| CP59 | 4 | 00003084 | 00000001 | I | | | 4912 | 364 4911U |
| CP6 | 4 | 00001348 | 00000001 | I | | | 2572 | 351 2571U |

X390 3.1.04 2012/08/17 13.13

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| CP6A | 4 | 0000135A | 00000001 | I | | | 2578 | 2573B |
| CP6B | 4 | 00001368 | 00000001 | I | | | 2581 | 3746 |
| CP61 | 4 | 0000397C | 00000001 | I | | | 5848 | 365 5847U |
| CP62 | 4 | 00003204 | 00000001 | I | | | 5043 | 365 5042U |
| CP63 | 4 | 00004608 | 00000001 | I | | | 7018 | 365 7017U |
| CP64 | 4 | 0000418C | 00000001 | I | | | 6493 | 366 6492U |
| CP65 | 4 | 00004718 | 00000001 | I | | | 7111 | 366 7110U |
| CP66 | 4 | 00004736 | 00000001 | I | | | 7134 | 366 7133U |
| CP67 | 4 | 0000477E | 00000001 | I | | | 7172 | 366 7171U |
| CP68 | 4 | 000047A4 | 00000001 | I | | | 7199 | 367 7198U |
| CP69 | 4 | 000052A2 | 00000001 | I | | | 8144 | 367 8143U |
| CP7 | 4 | 0000260C | 00000001 | I | | | 4016 | 351 4015U |
| CP70 | 4 | 000047B0 | 00000001 | I | | | 7218 | 367 7217U |
| CP71 | 4 | 000042EC | 00000001 | I | | | 6612 | 367 6611U |
| CP72 | 2 | 000047B8 | 00000001 | I | | | 7234 | 368 7233U |
| CP73 | 4 | 000047D8 | 00000001 | I | | | 7258 | 368 7257U |
| CP74 | 4 | 00004808 | 00000001 | I | | | 7288 | 368 7287U |
| CP75 | 4 | 0000482E | 00000001 | I | | | 7317 | 368 7316U |
| CP76 | 4 | 0000484A | 00000001 | I | | | 7343 | 369 7342U |
| CP77 | 4 | 00004A9A | 00000001 | I | | | 7509 | 369 7508U |
| CP78 | 4 | 00004B92 | 00000001 | I | | | 7583 | 369 7582U |
| CP79 | 4 | 00004C20 | 00000001 | I | | | 7635 | 369 7634U |
| CP8 | 4 | 00002618 | 00000001 | I | | | 4027 | 352 4026U |
| CP8A | 4 | 00002638 | 00000001 | I | | | 4037 | 4028B |
| CP8B | 4 | 00002620 | 00000001 | I | | | 4029 | 4041B |
| CP80 | 4 | 00005026 | 00000001 | I | | | 7919 | 370 7918U |
| CP81 | 4 | 00001D48 | 00000001 | I | | | 3331 | 370 |
| CP81A | 4 | 00001D7C | 00000001 | I | | | 3346 | 3333B |
| CP81B | 4 | 00001D54 | 00000001 | I | | | 3334 | 3348B |
| CP81C | 6 | 00001D88 | 00000001 | I | | | 3350 | 3335B |
| CP81D | 2 | 00001D5C | 00000001 | I | | | 3336 | 3398B 3406B |
| CP81E | 4 | 00001D72 | 00000001 | I | | | 3342 | 3339B |
| CP81F | 4 | 00001DA2 | 00000001 | I | | | 3356 | 3354B |
| CP81G | 4 | 00001E32 | 00000001 | I | | | 3393 | 3357B 3376B 3379B |
| CP81H | 2 | 00001DB2 | 00000001 | I | | | 3360 | 3365B |
| CP81I | 4 | 00001DCA | 00000001 | I | | | 3367 | 3361B 3363B |
| CP81J | 4 | 00001E1E | 00000001 | I | | | 3387 | 3368M 3371M 3380 3385M 3388 3390M |
| CP81K | 6 | 00001DDE | 00000001 | I | | | 3372 | 3370B |
| CP81L | 4 | 00001DF4 | 00000001 | I | | | 3377 | 3391B |
| CP81M | 4 | 00001E0C | 00000001 | I | | | 3383 | 3381B |
| CP81N | 4 | 00001E22 | 00000001 | I | | | 3388 | 3384B |
| CP81P | 4 | 00001E68 | 00000001 | I | | | 3408 | 3396B |
| CP81Q | 6 | 00001E4C | 00000001 | I | | | 3399 | 3409B 3419B |
| CP81R | 4 | 00001E56 | 00000001 | I | | | 3401 | 3399M |
| CP81S | 4 | 00001EE6 | 00000001 | I | | | 3445 | 3405B |
| CP81SA | 4 | 00001F6C | 00000001 | F | F | | 3482 | 3448M 3451 3468M 3477 3484M 3487 |
| CP81T | 6 | 00001E86 | 00000001 | I | | | 3415 | 3411B |
| CP81U | 4 | 00001E82 | 00000001 | I | | | 3414 | 3412M |
| CP81UA | 4 | 00001E90 | 00000001 | I | | | 3417 | 3415M |
| CP81WA | 4 | 00001EBC | 00000001 | I | | | 3433 | 3429B |
| CP81WB | 4 | 00001ED0 | 00000001 | I | | | 3439 | 3434B |
| CP81WE | 6 | 00001F2C | 00000001 | I | | | 3464 | 3459M 3460M 3461M 3462M |
| CP81WF | 4 | 00001F4C | 00000001 | I | | | 3474 | 3470B |
| CP81WG | 4 | 00001F54 | 00000001 | I | | | 3476 | 3472B |
| CP81WH | 4 | 00001F58 | 00000001 | I | | | 3477 | 3485 |
| CP81WI | 4 | 00001F96 | 00000001 | I | | | 3494 | 3529B 3539B 3555B 3559B |
| CP81WJ | 6 | 00001FB4 | 00000001 | I | | | 3502 | 3498B |
| CP81WK | 4 | 0000208C | 00000001 | I | | | 3568 | 3500B |
| CP81WL | 1 | 00002338 | 00000001 | X | X | | 3749 | 3502 3511M 3513 |
| CP81WM | 4 | 00001FBE | 00000001 | I | | | 3504 | 3508B |
| CP81WN | 4 | 0000205A | 00000001 | I | | | 3557 | 3506B |
| CP81WP | 6 | 000021A4 | 00000001 | I | | | 3643 | 3510B |
| CP81WQ | 6 | 00001FDE | 00000001 | I | | | 3511 | 3623B |
| CP81WR | 4 | 0000231C | 00000001 | X | X | | 3742 | 3514 |
| CP81WS | 2 | 0000220A | 00000001 | I | | | 3671 | 3522B 3532B 3547B |
| CP81WT | 4 | 00002036 | 00000001 | I | | | 3541 | 3531B |
| CP81WU | 4 | 0000204C | 00000001 | I | | | 3547 | 3543B |
| CP81WV | 4 | 00002320 | 00000001 | I | | | 3743 | 3546 3568M 3614 3656M 3667 3690 3706M 3730 |
| CP81YA | 6 | 00002086 | 00000001 | I | | | 3567 | 3646B |
| CP81YB | 4 | 000020E6 | 00000001 | I | | | 3591 | 3570B |
| CP81YC | 4 | 000020DE | 00000001 | I | | | 3589 | 3572B 3582B |
| CP81YD | 4 | 00002194 | 00000001 | I | | | 3638 | 3574M 3575M |
| CP81YE | 2 | 00002198 | 00000001 | I | | | 3639 | 3576M |
| CP81YF | 2 | 00002192 | 00000001 | I | | | 3637 | 3577 |
| CP81YG | 4 | 0000219C | 00000001 | I | | | 3641 | 3584M |
| CP81YH | 2 | 0000219A | 00000001 | I | | | 3640 | 3585 |
| CP81YI | 2 | 00002168 | 00000001 | I | | | 3625 | 3590B 3594B |
| CP81YJ | 4 | 0000217E | 00000001 | I | | | 3631 | 3592B |
| CP81YK | 4 | 0000210A | 00000001 | I | | | 3601 | 3598B |
| CP81YL | 4 | 00002106 | 00000001 | I | | | 3600 | 3630B |
| CP81YM | 4 | 000021A0 | 00000001 | I | | | 3642 | 3606M |
| CP81YN | 4 | 000021D6 | 00000001 | I | | | 3656 | 3620B 3683B 3686B 3697B |
| CP81YNA | 4 | 0000215E | 00000001 | I | | | 3621 | 3617M |
| CP81YQ | 1 | 00002339 | 00000001 | X | X | | 3750 | 3653 |
| CP81YR | 4 | 0000232A | 00000001 | I | | | 3746 | 3657M 3668 |
| CP81YS | 4 | 00002326 | 00000001 | I | | | 3745 | 3661 |
| CP81YT | 4 | 0000222A | 00000001 | I | | | 3678 | 3675M |
| CP81YU | 2 | 0000225A | 00000001 | I | | | 3689 | 3676M 3677M 3680M 3694 |
| CP81YV | 6 | 00002238 | 00000001 | I | | | 3681 | 3679B |
| CP81YW | 4 | 00002264 | 00000001 | I | | | 3693 | 3682B |
| CP81ZA | 4 | 0000227A | 00000001 | I | | | 3698 | 3694M 3695M 3696M |
| CP81ZB | 4 | 00002290 | 00000001 | I | | | 3704 | 3733B |
| CP81ZC | 4 | 000022F6 | 00000001 | I | | | 3731 | 3705B |
| CP81ZD | 4 | 00002310 | 00000001 | I | | | 3739 | 3710M 3726 |
| CP81ZE | 4 | 00002318 | 00000001 | I | | | 3741 | 3711M |
| CP81ZF | 4 | 000022E4 | 00000001 | I | | | 3725 | 3718B |
| CP81ZG | 4 | 000022DC | 00000001 | I | | | 3722 | 3719M 3720M |

X390 3.1.04 2012/08/17 13.13

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Symbol    Length    Value     Id     Type Asm  Program    Defn  References                          X390 3.1.04  2012/08/17 13.13

CP81ZH         4 000022F2 00000001  I                     3730  3723B
CP81ZI         4 00002314 00000001  I                     3740  3725M
CP83           4 0000434A 00000001  I                     6693   370  6692U
CP84           4 000042F4 00000001  I                     6626   350   351   352   353   358   359   360   361   362   363
                                                                 364   365   370   371  6625U
CP85           4 000032B8 00000001  I                     5113   371  5112U
CP86           4 00005054 00000001  I                     7947   371  7946U
CP87           4 0000508E 00000001  I                     7981   371  7980U
CSWE2          1 000000F8           U                     2509  4947B
DECAADD        4 000001DC 00000001  A A                    337   154  4449  5010  5804  5890  6175  6495  6503  6612  6875
DECAREA       25 00000F8C 00000001  X X                   1875   337
DECOMP         6 00000D30 00000001  I                     1561  1630B 3897B 4073B 5590B 6132B 6693B
DERE2          4 00002E1E 00000001  I                     4665  5451
DESTROY        1 000000FF           U                      919  1015
DHEB2          4 000052EE 00000001  I                     8163  5449  9023B
DHZB1          4 000058C4 00000001  I                     8573  4788  5450  8557B 8560B
DJH1E43        4 0000151E 00000001  I                     2714  5452
DTSW           1 000000C2           U                     2468  2469
ENDPOOL        4 000000C4 FFFFFFFF  F F                   2142   441
ENTIER         1 00000140           U                     5170  6283B
ENTRY          1 0000000F           U                      133  6397M 6398B 9090M 9091B 9134M 9135B 9155M 9156B
EODUT2         4 00000074 FFFFFFFF  A A                   2019   156M
EODUT3         4 00000078 FFFFFFFF  A A                   2020   158M
EPILOGB        1 000000EC           U                     2503  4092B
EP212          4 00000416 00000001  X X                    454   408M  409M  410   443M  444
EQD1           4 00002DA0 00000001  I                     4631  4603B
EQD2           4 00002D48 00000001  I                     4605  4600  4632B
EQD4           4 00002D56 00000001  I                     4609  4607B
EQF2           4 00002DCC 00000001  I                     4643  4641M
EQG1           4 00002DE0 00000001  I                     4647  4635B
ERDOUBLE       8 00000420 00000001  D D                    455   423M  424M  425M  426
ERET           4 00000090 FFFFFFFF  F F                   2120   153M
ERE2           4 00002E32 00000001  I                     4671  4667B
ERE3           4 00002E60 00000001  I                     4685  4675B
ERJ4           4 00002E88 00000001  I                     4696  4686M 4689M 4692M
ERJ41          4 00002E82 00000001  I                     4693  4688B 4691B
ERR166         4 00000F6C 00000001  I                     1852  6755B 6918B 6951B
ER1            4 00000364 00000001  I                      402   397B
ER2            4 00000368 00000001  I                      403   392B
ER3            6 00000378 00000001  I                      408   417B
ER4            4 0000038A 00000001  I                      413   406B
ER5            4 0000038E 00000001  I                      414   411B
ER6            6 000003D4 00000001  I                      436   416B  429B
ER7            4 0000040A 00000001  I                      449   442B
ESB1           4 00002EA4 00000001  I                     4705  4723B
ESC2           4 00002EE6 00000001  I                     4725  4715B
ESC3           4 00002F86 00000001  I                     4769  4734M
ESD1           4 00002EBC 00000001  I                     4711  4706M 4750
ESE1           2 00002FA2 00000001  I                     4776  4719
ESE2           2 00002F78 00000001  I                     4764  4740  4742
ESE22          4 00002EF6 00000001  I                     4730  4760B
ESE3           4 00002F8C 00000001  I                     4771  4730M
ESE4           4 00002F9E 00000001  I                     4775  4700M 4739M 4742
ESE5           6 00002F90 00000001  I                     4772  4736M 4737M 4738M 4739
ESF4           6 00002F6A 00000001  I                     4758  4704M 4749M 4750M 4755M 4756M
ESH1           4 00002FA4 00000001  I                     4777  4717M
ESJ2           4 00002F7E 00000001  I                     4766  4732M
ESK1           4 00002FAA 00000001  I                     4779  4709M
ETB3           4 00002D68 00000001  I                     4613  4746B
ETE3           4 00002D70 00000001  I                     4615  4620B
ETF2           4 00002D8A 00000001  I                     4622  4617B
ETF4           4 00002D98 00000001  I                     4627  4618B
EWF1           4 00002FD6 00000001  I                     4810  4804B
EXC            4 000001E8 00000001  A A                    341  5504  5813  5901  6161  6588  6881
FAC2           4 0000304C 00000001  I                     4865  4859B
FAE2           2 00003040 00000001  I                     4860  4868B
FCTVALST       1 00000090           U                     2436  1031  2439
FEB2           4 00003072 00000001  I                     4890  4884B
FEC1           4 00003062 00000001  I                     4885  4894B
FGAB2          4 00003950 00000001  I                     5815  5573B
FGAF1          4 000037A8 00000001  I                     5678  5609B 5611B 5614B 5622B 5635B 5638B 5665B
FGAG1          6 000037B4 00000001  I                     5681  5580B
FGBD1          4 00003818 00000001  I                     5709  5693B 5703B 5705B
FGBD11A        4 00003852 00000001  I                     5730  5723B
FGBGADR        4 00004184 00000001  A A                   6477  5886
FGBG1          2 00003872 00000001  I                     5739  5735B
FGBG12         4 00003878 00000001  I                     5741  5763B
FGBG20         2 000038C2 00000001  I                     5770  5800B 6477
FGBG22         4 000038DA 00000001  I                     5778  5776B
FGBG25         4 000038F2 00000001  I                     5784  5791B
FGBG27         4 000038FC 00000001  I                     5787  5779B 5781B 5783B
FGBG28         4 0000390C 00000001  F F                   5793  5774M 5784
FGBG29         4 00003910 00000001  F F                   5794  5773M 5785
FGBG4          4 00003940 00000001  I                     5811  5802B
FGBH1          4 00003914 00000001  I                     5800  5713B 5743B
FGBH1A         4 00003938 00000001  I                     5809  5806B
FGBK5          4 0000393C 00000001  I                     5810  5812B
FGCB3          4 000036FA 00000001  I                     5613  5588B
FGCD3          4 00003702 00000001  I                     5618  5598B
FGCD34         4 00003706 00000001  I                     5619  5595M
FGCD35         4 0000370E 00000001  I                     5621  5593M
FGCE3          4 00003716 00000001  I                     5626  5602B
FGCF21         4 000036D2 00000001  I                     5603  5600B 5639B
FGCF25         4 000036E6 00000001  I                     5607  5604M 5605M
FGCF33         4 0000373A 00000001  I                     5637  5629B
FGCF34         4 00003746 00000001  I                     5641  5596M 5631
FGCF35         4 0000374A 00000001  I                     5642  5630M
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Symbol    Length    Value     Id    Type Asm  Program   Defn  References                     X390 3.1.04  2012/08/17 13.13

FGCF4          4 00003752 00000001  I                   5647  5627B
FGCF41         4 0000376E 00000001  I                   5654  5648B
FGCF42         6 0000377E 00000001  I                   5660  5656B
FGCF44         2 00003792 00000001  I                   5668  5661
FGCF45         4 0000379C 00000001  F F                 5672  5660M
FGOUTPAR       4 00003968 00000001  F F                 5826  5701M 5751M 5752M 5754  5762M
FGXFC          4 00003964 00000001  X X                 5825  5650
FKB25          4 000031E4 00000001  I                   5017  5023B
FKC2           4 000031EC 00000001  I                   5020  4915B 4919B
FKF42          2 0000316C 00000001  H H                 4979  4971M
FKF42A         4 00003168 00000001  I                   4977  4973B
FKF45          4 00003176 00000001  I                   4984  5001B
FKF46          4 00003190 00000001  F F                 4991  4988M
FKF48          4 00003200 00000001  F F                 5028  4987M 4992
FKG14          4 000030E4 00000001  I                   4941  4935B
FKG15          4 000030C8 00000001  I                   4931  4928M 4929M
FKG16          4 000030F0 00000001  I                   4944  4942M
FKH1           4 000030F4 00000001  I                   4945  4939B 5015B
FKH2           4 000031D8 00000001  I                   5013  4924B
FKJ2           4 00003106 00000001  I                   4951  4912  4917B 4921B 5018B
FOC2           4 00003984 00000001  I                   5850  5848
FOD4           4 000039D2 00000001  I                   5869  5866B 5986B 5988B 6008B 6017B 6024B 6033B
FOE2PCH        2 00004178 00000001  H H                 6470  5858M 5859  5861M 5913  5918M 5919  5923  5925  5931  5985
                                                              6444
FOF4           4 000039DA 00000001  I                   5871  5857B 5947B 5963B 5971B 6038B 6045B 6068B 6074B 6079B 6091B
                                                              6122B 6139B 6153B 6156B
FOH2           4 000039BA 00000001  I                   5863  5910B 5981B
FORMINUS       2 00002FAE 00000001  X X                 4783  4653
FORMPM         1 00000030           U                    923   933  5722  5734
FPA1           4 00003B48 00000001  I                   5973  5882B
FPA22          4 000039FA 00000001  I                   5880  5878B
FPA23          4 000039FE 00000001  I                   5881  5877B
FPB21          4 00004086 00000001  I                   6395  6391M
FPB22          4 0000408E 00000001  I                   6397  6393M
FPC5           4 00003A30 00000001  I                   5894  5889B
FPD5           4 00003A3E 00000001  I                   5899  5895B
FPE4           4 00003A4A 00000001  I                   5902  5900B
FPG2           4 00003A12 00000001  I                   5886  5884B 5976B
FPG3           4 00003A2C 00000001  I                   5893  5904B
FPROOCM        1 00000001           U                    591   596   601
FPR0           1 00000000           U                    122   607M  620M
FQA2           4 00003A56 00000001  I                   5908  5862B
FQA2A          6 00003A7E 00000001  I                   5918  5916B
FQD3           4 00003AAC 00000001  I                   5931  5914B
FQE3           4 00003ABE 00000001  I                   5937  5932B
FQF3           4 00003AD2 00000001  I                   5942  5939B
FQG3           4 00003AE2 00000001  I                   5946  5943B
FQG35          4 00003B2E 00000001  I                   5965  5954M 5960
FQG36          6 00003B36 00000001  I                   5967  5955M 5956M 5958M 5959M
FQH4           4 00003B3C 00000001  I                   5969  5949B
FQJ1           4 00003B52 00000001  I                   5978  5912B 5922B 5924B 5926B 5928B 5934B 5938B 5941B 5945B 5951B
                                                              5953B
FRA3           4 00003B5C 00000001  I                   5985  5868B
FRE24          4 00003B9E 00000001  I                   6002  5998M 5999M
FRF3           4 00003BE0 00000001  I                   6023  5990B 5992B
FRG2           4 00003BBC 00000001  I                   6010  6004B
FRG24          2 00003BD6 00000001  I                   6019  6013
FRG25          4 00003BDC 00000001  I                   6021  6011M 6012M
FRG45          4 00003C00 00000001  I                   6032  6028M 6029M
FRH3           4 00003C08 00000001  I                   6035  6026B 6057B 6066B 6105B 6114B
FSA            1 0000000D           U                    132  1021  1022  1027  1031  1033  1096  3856  4092  4670  4765
                                                              4947  5095  5243  5642  5643  5673  5674  5679  5725  5738
                                                              5965  5966  6006  6201  6202  6283  6709
FSAA           4 00003CDE 00000001  I                   6104  6098B
FSAERR         1 000001CC           U                   2529  2533  2534  2535  2536  2537  2538  2539
FSAREA         1 00000000 FFFFFFFF  U                   2426  2431  2436  2438  2439  2440  2443  2450  2452  2456  2458
                                                              2462  2464  2466  2468  2471  2478  2480  2482  2484  2490
                                                              2492  2494  2497  2499  2501  2503  2505  2507  2509  2511
                                                              2513  2517  2519  2521  2524  2526
FSBB           4 00003CEA 00000001  I                   6108  6100B
FSBB1          4 00003CFA 00000001  I                   6113  6109B
FSB1           4 00003C12 00000001  I                   6042  5870B
FSB3           4 00003C72 00000001  I                   6070  6043B
FSB3A          4 00003C7E 00000001  I                   6073  6071B
FSD3           4 00003C46 00000001  I                   6058  6053B 6055B
FSD4           4 00003C4A 00000001  I                   6059  6051B
FSD5           4 00003C6A 00000001  I                   6067  6062B 6064B
FSD6           4 00003C6E 00000001  I                   6068  6060B
FSE1           4 00003D40 00000001  I                   6136  6095B 6131B
FSFJ35         2 00003CA6 00000001  I                   6086  6106B 6111B 6116B
FSF3A          4 00003CA2 00000001  I                   6085  6082B
FSG4           4 00003D0A 00000001  I                   6120  6080B
FSJ2           4 00003CBE 00000001  I                   6093  6084B
FSSUBR         4 00003D18 00000001  I                   6126  6046B 6093B 6120B
FSSUBR1        4 00003D4A 00000001  I                   6141  6127B 6129B
FSSUBR2        4 00003D4E 00000001  I                   6142  6135B
FTB2           4 00003D60 00000001  I                   6150  5864B
FTC2           4 00003D70 00000001  I                   6155  6151B
FTD3           4 00003DB8 00000001  I                   6175  6159B
FTE1           2 00003D8A 00000001  I                   6162  6160B
FTG1           4 00003DD2 00000001  I                   6184  6167B
FTG12          6 00003E0C 00000001  I                   6201  6185M 6186M 6195
FTG13          4 00003E12 00000001  I                   6202  6190M 6191M 6192M
FTG3           4 00003E1A 00000001  I                   6208  6253B
FTG31          4 00003E4A 00000001  I                   6220  6213M 6217M 6218M
FTG32          4 00003E4E 00000001  I                   6221  6227B
FTG33          2 00003E52 00000001  I                   6222  6215M 6225M
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Symbol     Length    Value     Id      Type Asm  Program    Defn  References                         X390 3.1.04  2012/08/17 13.13

FTG35           6 00003E58 00000001  I                      6225  6208
FTH4            4 00003E66 00000001  I                      6229  6223B
FTH42           2 00003E90 00000001  I                      6243  6234M 6237
FTH43           2 00003E9A 00000001  I                      6246  6235M 6236M
FUB2            4 00003EA2 00000001  I                      6250  6164B 6171B 6173B
FUB3            4 00003F80 00000001  I                      6315  6251B
FUB31           4 00003FAC 00000001  I                      6326  6320M 6323M 6324M
FUB4            4 00003FBA 00000001  I                      6330  6315
FUB41           2 00003FCA 00000001  I                      6334  6327M 6331M
FUB42           4 00003FC6 00000001  I                      6333  6328B
FUD1            4 00003EB6 00000001  I                      6258  6169B
FUD10           6 00003EDE 00000001  I                      6268  6265B
FUD11           4 00003EF2 00000001  I                      6272  6297B 6300B
FUD12           4 00003EC6 00000001  I                      6262  6259B
FUD13           4 00003F24 00000001  I                      6287  6262
FUD14           6 00003F58 00000001  I                      6302  6261B
FUD15           4 00003EEE 00000001  I                      6271  6268M 6269M
FUD16           2 00003F1E 00000001  I                      6284  6275M 6276M
FUD17           4 00003F16 00000001  I                      6282  6280B
FUD18           4 00003F50 00000001  I                      6299  6288B
FUD19           2 00003F46 00000001  I                      6295  6293M
FUD2            4 00003FD0 00000001  I                      6339  6254B
FUF1            4 00004032 00000001  I                      6371  6199B 6241B 6285B
FUF2            2 00003FEC 00000001  I                      6349  6335B
FUG2            6 00004002 00000001  I                      6358  6378B
FUG3            4 0000402A 00000001  I                      6366  6304B
FUNCPM          1 00000003           U                       927   951
FUOTFP          1 00004183 00000001  X X                    6476  6383  6385M 6427M
FUOTRG          1 00004182 00000001  X X                    6475  6194M 6233M 6278M 6322M 6327  6332M 6343M 6350  6362  6373
FUOTSC          2 0000417C 00000001  X X                    6472  6361M 6362M 6363M 6364  6365M 6371M
FXC2            4 00003292 00000001  I                      5082  5046B 5048B
FXE4            4 000032A4 00000001  I                      5089  5053B
FXG3            6 00003254 00000001  I                      5066  5055B
FXG35           4 00003264 00000001  I                      5069  5066M 5067M
FXG36           4 0000327A 00000001  I                      5075  5073M
FXH15           4 0000324A 00000001  I                      5060  5056M 5057M
FXH2            4 000032AC 00000001  I                      5094  5076B
FXJ1            4 00003282 00000001  I                      5078  5043  5050B 5062B 5083B 5087B 5096B
GAC2            4 00004708 00000001  I                      7087  7024B
GAD1            4 00004628 00000001  I                      7026  7022B
GAH2            4 00004670 00000001  I                      7044  7034B
GAH3            4 0000467C 00000001  I                      7047  7032B 7045B
GAJ1            2 00004666 00000001  I                      7041  7036M 7039M
GAJ11           4 00004668 00000001  I                      7042  7070B
GBC2            4 0000469C 00000001  I                      7056  7050B
GBC4            4 00004690 00000001  I                      7052  7057B
GBC5            4 00004650 00000001  I                      7036  7054B
GBD4            4 00004624 00000001  I                      7025  7018  7027B
GBE1            4 000046A4 00000001  I                      7059  7030B
GBF2            4 000046D4 00000001  I                      7072  7062B
GBF3            4 000046E0 00000001  I                      7075  7060B 7073B
GBG1            2 000046CE 00000001  I                      7069  7064M 7067M
GBG11           4 000046B8 00000001  I                      7064  7082B
GBH5            4 00004700 00000001  I                      7084  7078B
GBK4            4 000046F4 00000001  I                      7080  7085B
GDAB3           4 000042D6 00000001  I                      6588  6496B
GDAE1           4 000041A6 00000001  I                      6501  6494B
GDAG1           4 000041D2 00000001  I                      6514  6504B 6506B 6508B
GDAH11          4 000041E4 00000001  I                      6520  6512B
GDAJ1           4 000041EC 00000001  I                      6523  6516B
GDBA1A          4 00004218 00000001  I                      6534  6531B
GDBA2           4 0000426C 00000001  I                      6557  6529B
GDBA3           4 00004224 00000001  I                      6539  6527B 6533B 6558B 6560B 6562B
GDBB15          1 0000421E 00000001  U                      6537  6566B
GDBC2           6 0000421E 00000001  I                      6538  6521B
GDBG45          4 0000424E 00000001  I                      6548  6546M
GDBH4           4 00004258 00000001  I                      6551  6544B
GDBH42          4 00004266 00000001  I                      6554  6586B
GDCA1           4 0000428E 00000001  I                      6570  6525B
GDCC1           4 000042AE 00000001  I                      6578  6573B
GDCG1           6 000042C8 00000001  I                      6584  6571B
GDSA            1 00000009           U                       129  1014M 1135M 4938M 4944M 5075M 5621M 7666M 8019M 8306M
GENRLD          4 000005BC 00000001  I                       685  4993B 5758B
GENTXTP2        6 000005E0 00000001  I                       703   619B 2907B 3005B 3009B 3025B 6221B 6294B 6333B 7040B 7789B
                                                                  7840B 8204B 8383B 8544B
GENTXTP4        4 000005DC 00000001  I                       699   606B 1164B 1512B 2874B 2877B 2904B 2929B 3001B 3014B 3021B
                                                                  3082B 3087B 3092B 3111B 6219B 6270B 6325B 7807B 7846B 8519B
                                                                  8568B
GENTXTS         4 000005D0 00000001  I                       693   949B  973B  981B 2631B 2734B 2766B 2860B 2917B 2923B 3071B
                                                                  3303B 3311B 3578B 3586B 3664B 3727B 3806B 3962B 3968B 3975B
                                                                  4295B 4311B 4336B 4345B 4389B 4720B 4741B 5209B 5632B 5662B
                                                                  5755B 5961B 6014B 6196B 6238B 6702B 7660B 8006B 8408B 9063B
                                                                  9070B 9198B 9208B
GENTXT2         4 000005E6 00000001  I                       707   543B 2758B 2848B 2990B 3128B 3145B 3153B 3159B 3247B 3275B
                                                                  3289B 3544B 3688B 3916B 4288B 4380B 4401B 4416B 4548B 4936B
                                                                  4974B 5414B 5657B 6549B 7068B 7878B 8651B 8679B 8731B 8811B
                                                                  8919B 8943B 8969B
GENTXT4         4 000005EA 00000001  I                       711   551B  570B  612B 1013B 1134B 1208B 1258B 1390B 2727B 2754B
                                                                  2845B 2867B 2891B 2896B 2899B 2934B 2972B 2980B 2986B 2993B
                                                                  3007B 3051B 3061B 3077B 3108B 3124B 3132B 3137B 3141B 3149B
                                                                  3172B 3177B 3185B 3233B 3239B 3243B 3267B 3271B 3281B 3285B
                                                                  3386B 3413B 3721B 3855B 4064B 4091B 4156B 4283B 4328B 4333B
                                                                  4410B 4562B 4642B 4669B 4710B 4930B 4943B 4945B 4977B 4990B
                                                                  5068B 5074B 5094B 5359B 5606B 5618B 5620B 5678B 5724B 5736B
                                                                  6000B 6005B 6030B 6394B 6421B 6423B 6430B 6447B 6547B 7384B
                                                                  7401B 7409B 7457B 7530B 7558B 7609B 7729B 7894B 8072B 8305B
                                                                  8311B 8355B 8668B 8734B 8756B 8912B 8928B
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Symbol    Length    Value     Id    Type Asm  Program    Defn  References                          X390 3.1.04  2012/08/17 13.13

GENTXT6        4 000005EE 00000001  I                     715   699M  707M  711M  717M 1095B 1402B 2746B 2783B 2807B 2882B
                                                                2913B 3102B 3156B 3165B 3199B 3253B 3400B 3416B 3463B 3887B
                                                                4179B 4693B 4757B 5058B 6282B 6396B 6439B 6669B 7373B 7435B
                                                                7487B 7545B 7614B 7711B 7815B 8038B 8058B 8345B 9133B 9154B
GEN1           4 00000602 00000001  I                     720   689B
GEN2           4 000005FE 00000001  I                     719   695B
GEN3           4 00000658 00000001  I                     749   726B  728B  743B
GEN4           2 0000064C 00000001  I                     742   811B  833B
GEN4A          4 00000652 00000001  I                     744   722B  724B
GEN5           6 00000728 00000001  I                     826   832B
GEN6           4 0000062A 00000001  I                     729   789B  792B
GETMSTO        1 00000114           U                    2521  4765B
GETPARP        6 0000415E 00000001  I                    6460  5957B 6010B 6027B 6405B
GFC2           4 0000472A 00000001  I                    7117  7112B
GHC2           4 0000474A 00000001  I                    7139  7136B
GHC3           4 00004758 00000001  I                    7144  7140B
GHC4           4 0000475E 00000001  I                    7146  7150B
GHC5           4 00004770 00000001  I                    7152  7147B
GJC2           4 0000479C 00000001  I                    7181  7173B
GLF2           4 000047AC 00000001  I                    7201  7199
GNB2           4 0000571A 00000001  I                    8452  8145B
GND2           4 0000572E 00000001  I                    8458  8148B
GND21          4 0000573E 00000001  I                    8463  8459B
GND22          4 00005748 00000001  I                    8468  8150B
GND3           4 00005736 00000001  I                    8460  8466B 8469B 8474B
GNE3           6 00005724 00000001  I                    8456  8461B
GOB3           4 0000587A 00000001  I                    8554  8158B
GOEZ           4 0000560E 00000001  I                    8377  8500B 8571B 8751B
GOE1           4 0000560A 00000001  I                    8376  8413B 8483B 8485B 8533B 8654B 8682B
GOE11          4 00005760 00000001  I                    8476  8152B
GOE111         4 00005778 00000001  I                    8482  8477B
GOE112         4 00005830 00000001  I                    8530  8372B 8479B 8481B
GOE2           2 00005788 00000001  I                    8487  8206B 8386B 8528B 8536B 8546B
GPBN           2 00000A60 FFFFFFFF  H H                  2388   851M 1015M 1123  1125  1129M 1139M 2769M 2888M 3056M 3064
                                                                3067M 3343M 3430M 3435M 3495M 5080M 5680M 6664M 6739M 7704M
                                                                8028M 8290  8292  8297M 8307M
GPC3           4 000009D6 00000001  I                    1139  1124B
GPC31          2 000009AA 00000001  I                    1127  1140B
GPC4           4 000009CC 00000001  I                    1135  1133M
GPRA           1 00000003           U                     124  4696M 4711  4764  4770  4776  4779M
GPRB           1 00000005           U                     125  4776M 4777M 4778
GPRC           1 00000006           U                     126  4695M 4768  4778M
GQD3           4 00000A0A 00000001  I                    1165  1161M 1162M 1163M 1170  1255M
GQE3           4 000009EA 00000001  I                    1158  1232B
GQF3           4 00000A0E 00000001  I                    1166  1260B
GRC3           4 00000A5E 00000001  I                    1200  1192B
GRD3           4 00000A86 00000001  I                    1209  1010  1012  1206M 1207M
GRD31          4 00000A72 00000001  I                    1205  1201B
GREGN          2 000001D8 00000001  H H                   335  4616M 4805  4807M 4816  6892  6893M 6931  6932M
GRE3           4 00000A4A 00000001  I                    1194  1211B
GTD3           4 00000AE0 00000001  I                    1259  1254M 1256M 1257M
GTE3           4 00000ABC 00000001  I                    1251  1278B
GVC2           4 00000B0A 00000001  I                    1300  1297B
GVC21          4 00000B1A 00000001  I                    1304  1303M 1309
GVE2           6 00000B2E 00000001  I                    1309  1305B
GWD3           4 00000B78 00000001  I                    1343  1334B
GWD4           4 00000B6E 00000001  I                    1339  1338M
GWD5           4 00000B58 00000001  I                    1333  1340B
GWD51          4 00000B50 00000001  I                    1331  1329M 1330M
GWD6           4 00000B6A 00000001  I                    1338  1348B
GXC3           4 00000BCC 00000001  I                    1391  1388M 1389M
GXC4           6 00000BD4 00000001  I                    1394  1386B
GXC5           6 00000BFC 00000001  I                    1403  1394M 1395M 1396M 1399M
GXC6           4 00000BEE 00000001  I                    1400  1398B
GZC2           4 00000C18 00000001  I                    1426  1423B
GZC21          4 00000C30 00000001  I                    1432  1431M 1437
GZE2           6 00000C44 00000001  I                    1437  1433B
HAD0           4 00000C88 00000001  I                    1467  1477B
HAD1           4 00000C74 00000001  I                    1462  1469B
HAD2           4 00000C8C 00000001  I                    1468  1467M
HAD3           4 00000C96 00000001  I                    1472  1463B
HAD4           4 00000C68 00000001  I                    1459  1457M 1458M
HALFW          2 00000A64 FFFFFFFF  H H                  2392  3900M 3927  3929M 3932  3938  3940M 3953  4962M 4963  4980M
                                                                4998  5000M 5004M 5005  5419M 5420  5715M 5716  6176M 6177
                                                                6358M 6359  6387M 6388  6460M 6463  6578M 6579
HBC2           4 00000CE0 00000001  I                    1514  1392B 1404B
HBC3           4 00000CDC 00000001  I                    1513  1508M 1510M
HEB1           4 000052E6 00000001  I                    8161  9018B
HEC3           4 00005336 00000001  I                    8181  8166B
HEE3           4 000053B4 00000001  I                    8215  8213M 8214M
HEF2           4 0000531C 00000001  I                    8174  8172B
HEF21          4 000057B6 00000001  I                    8499  8498M
HEXFC          4 000042E8 00000001  X X                  6596  6575
HEXFFF         4 000001E0 00000001  X X                   339  1564  4964
HFB1           4 00005342 00000001  I                    8184  8164B 8182B
HFB11          2 000053C2 00000001  I                    8221  8191B
HFB12          2 00005394 00000001  I                    8205  8199M
HFB13          4 000053BA 00000001  I                    8218  8202B
HFB14          4 00005390 00000001  I                    8204  8219B
HFD2           6 000053F0 00000001  I                    8235  8189B
HFD3           6 00005412 00000001  I                    8244  8237B
HFE4           4 00005444 00000001  I                    8257  8248B
HFF2           4 000053E8 00000001  I                    8232  8227B
HFG2           4 000053E0 00000001  I                    8229  8233B
HFH3           4 0000542C 00000001  I                    8249  8258B
HFJ3           4 00005440 00000001  I                    8255  8252B
HGA5           4 000054FA 00000001  I                    8306  8304M
```

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| HGB1 | 4 | 0000544C | 00000001 | I | | | 8260 | 8187B |
| HGB2 | 4 | 0000551E | 00000001 | I | | | 8316 | 8282B |
| HGB4 | 4 | 000054BC | 00000001 | I | | | 8290 | 8286B |
| HGB41 | 4 | 000054D6 | 00000001 | I | | | 8297 | 8291B |
| HGB5 | 2 | 000054DA | 00000001 | I | | | 8298 | 8293B |
| HGC4 | 4 | 000054CE | 00000001 | I | | | 8294 | 8308B |
| HGD1 | 4 | 00005458 | 00000001 | I | | | 8263 | 8185B 8261B |
| HGD2 | 4 | 00005490 | 00000001 | I | | | 8279 | 8264B 8630B |
| HGE5 | 6 | 00005508 | 00000001 | I | | | 8310 | 8303B |
| HGF5 | 4 | 00005512 | 00000001 | I | | | 8312 | 8310M |
| HGG1 | 4 | 00005488 | 00000001 | I | | | 8276 | 8267B |
| HGG11 | 4 | 00005430 | 00000001 | I | | | 8250 | 8272B 8274B |
| HGH1 | 4 | 00005470 | 00000001 | I | | | 8269 | 8277B |
| HHSOURCE | 4 | 00002FB8 | 00000001 | F | F | | 4787 | 4655M 4665 |
| HJB1 | 4 | 0000554A | 00000001 | I | | | 8326 | 8280B |
| HJC1 | 6 | 000055B8 | 00000001 | I | | | 8354 | 8332B |
| HJC11 | 4 | 000055C2 | 00000001 | I | | | 8356 | 8354M |
| HJH1 | 6 | 0000556E | 00000001 | I | | | 8334 | 8288B 8295B 8314B 8358B |
| HJH11 | 6 | 000055A0 | 00000001 | I | | | 8346 | 8284M 8287M 8294M 8313M 8317M 8318M 8322M 8323M 8328M 8329M 8334M 8335M 8336M 8339M 8344M |
| HJH111 | 4 | 0000557A | 00000001 | I | | | 8336 | 8324B |
| HJH13 | 4 | 0000559C | 00000001 | I | | | 8345 | 8338B 8341B |
| HKA2 | 4 | 00005626 | 00000001 | I | | | 8382 | 8370B |
| HKD1 | 6 | 000055CE | 00000001 | I | | | 8360 | 8179B |
| HKD2 | 4 | 000056B6 | 00000001 | I | | | 8419 | 8368B |
| HKF2 | 4 | 000056BE | 00000001 | I | | | 8422 | 8364B |
| HKG2 | 4 | 00005604 | 00000001 | I | | | 8373 | 8404B 8449B |
| HKG22 | 4 | 000055FC | 00000001 | I | | | 8371 | 8514B |
| HKH4 | 2 | 0000562E | 00000001 | I | | | 8384 | 8360M 8361M 8365M 8382M 8419M 8422M |
| HKH41 | 4 | 0000562A | 00000001 | I | | | 8383 | 8363B 8367B 8420B 8423B |
| HLB2 | 4 | 0000586A | 00000001 | I | | | 8548 | 8512B |
| HLD1 | 6 | 000057BE | 00000001 | I | | | 8502 | 8174 8230B 8242B 8251 |
| HLE21 | 4 | 000055A6 | 00000001 | I | | | 8347 | 8524B 8691B |
| HLF2 | 4 | 00005872 | 00000001 | I | | | 8551 | 8508B |
| HLF3 | 4 | 0000583A | 00000001 | I | | | 8535 | 8522B |
| HLH3 | 2 | 00005864 | 00000001 | I | | | 8545 | 8538M 8543M |
| HLJ4 | 4 | 0000580C | 00000001 | I | | | 8520 | 8502M 8503M 8504M 8505M 8509M 8515M 8518M 8548M 8551M |
| HLJ41 | 4 | 00005808 | 00000001 | I | | | 8519 | 8507B 8511B 8517B 8549B 8552B |
| HOB1 | 4 | 000060D4 | 00000001 | I | | | 9140 | 8162B |
| HOB11 | 4 | 0000611A | 00000001 | I | | | 9158 | 9120B 9140B |
| HOB2 | 4 | 0000613E | 00000001 | I | | | 9167 | 9163B |
| HOB21 | 4 | 0000612A | 00000001 | I | | | 9162 | 9160B |
| HOB3 | 4 | 00006152 | 00000001 | I | | | 9172 | 9168B |
| HOB4 | 4 | 00006218 | 00000001 | I | | | 9223 | 9173M 9197 9207 |
| HOB5 | 4 | 0000621C | 00000001 | I | | | 9224 | 9194M 9195M 9204M 9206M |
| HOC11 | 6 | 000061AC | 00000001 | I | | | 9194 | 9179 |
| HOC31 | 4 | 00006100 | 00000001 | I | | | 9151 | 9141 |
| HOD1 | 6 | 000061CC | 00000001 | I | | | 9204 | 9130B 9151B |
| HQB1 | 4 | 00005F1E | 00000001 | I | | | 9017 | 8160B |
| HQD2 | 4 | 000004CC | 00000001 | I | | | 540 | 538M 539M |
| HQF21 | 6 | 00000536 | 00000001 | I | | | 568 | 531 |
| HQG1 | 2 | 000004DE | 00000001 | I | | | 544 | 542M |
| HQG2 | 4 | 00000546 | 00000001 | I | | | 571 | 568M 569M |
| HQH1 | 4 | 000004E0 | 00000001 | I | | | 545 | 572B |
| HQJ1 | 4 | 000004EC | 00000001 | I | | | 548 | 546B |
| HQJ11 | 4 | 000004F8 | 00000001 | I | | | 551 | 549B |
| HTB1 | 4 | 00005F26 | 00000001 | I | | | 9020 | 8555B |
| HTRICK | 1 | 00002FB0 | 00000001 | X | X | | 4784 | 4656 |
| HW | 1 | 0000009C | | U | | | 2441 | 6201M 6202 |
| HYG2 | 4 | 000058B8 | 00000001 | I | | | 8569 | 8565M |
| HZC2 | 4 | 000058FC | 00000001 | I | | | 8587 | 8576B |
| HZF1 | 4 | 000058E6 | 00000001 | I | | | 8581 | 8579B |
| IAB1 | 4 | 00005908 | 00000001 | I | | | 8590 | 8574B 8588B |
| IAC2 | 4 | 0000598E | 00000001 | I | | | 8626 | 8593B |
| IAD3 | 4 | 0000599A | 00000001 | I | | | 8629 | 8591B 8627B |
| IAE1 | 6 | 0000593A | 00000001 | I | | | 8603 | 8596B |
| IAF3 | 4 | 00005972 | 00000001 | I | | | 8616 | 8638B 8640B |
| IAG2 | 4 | 00005986 | 00000001 | I | | | 8623 | 8607B |
| IAG3 | 4 | 000059CA | 00000001 | I | | | 8642 | 8633B |
| IAH3 | 4 | 000059B2 | 00000001 | I | | | 8635 | 8643B |
| IAJ1 | 4 | 0000596E | 00000001 | I | | | 8615 | 8624B |
| IAK1 | 4 | 00005982 | 00000001 | I | | | 8621 | 8618B |
| IEC3 | 6 | 000059D2 | 00000001 | I | | | 8645 | 8585B |
| IED3 | 2 | 000059F0 | 00000001 | I | | | 8652 | 8645M 8646M 8650M 8657M |
| IED31 | 4 | 000059EC | 00000001 | I | | | 8651 | 8648B 8658B |
| IED4 | 4 | 000059FE | 00000001 | I | | | 8657 | 8649B |
| IEX50000 | 1 | 00000000 | 00000001 | J | | | 110 | 147U 2552 |
| IFC3 | 6 | 00005A06 | 00000001 | I | | | 8660 | 8581 8601B 8617 |
| IFD3 | 4 | 00005A30 | 00000001 | I | | | 8669 | 8660M 8661M 8662M 8663M 8667M 8684M 8687M |
| IFD31 | 4 | 00005A2C | 00000001 | I | | | 8668 | 8665B 8686B 8688B |
| IFD4 | 4 | 00005A68 | 00000001 | I | | | 8684 | 8666B |
| IFD41 | 4 | 00005A7C | 00000001 | I | | | 8690 | 8672B |
| IFG3 | 2 | 00005A5E | 00000001 | I | | | 8680 | 8671B 8674B 8677M 8678M |
| IMB1 | 4 | 00005638 | 00000001 | I | | | 8387 | 8526B 8655B 8692B |
| IMC4 | 4 | 000056C6 | 00000001 | I | | | 8425 | 8401B 8443B |
| IMD2 | 4 | 000056A8 | 00000001 | I | | | 8415 | 8391M 8392M 8406 8407 |
| IMD4 | 4 | 000056CE | 00000001 | I | | | 8428 | 8403B 8450B |
| IME4 | 4 | 000056D6 | 00000001 | I | | | 8431 | 8397B 8442B |
| IMF4 | 4 | 00005684 | 00000001 | I | | | 8405 | 8448B |
| IMG4 | 4 | 000056DE | 00000001 | I | | | 8434 | 8398B 8446B |
| IMH4 | 4 | 000056AE | 00000001 | I | | | 8417 | 8393M 8405M 8425M 8428M 8431M 8434M 8437M |
| IMH41 | 4 | 000056E6 | 00000001 | I | | | 8437 | 8400B 8445B |
| IMH5 | 4 | 000056B2 | 00000001 | I | | | 8418 | 8406M |
| IMH51 | 6 | 00005688 | 00000001 | I | | | 8406 | 8426B 8429B 8432B 8435B 8438B |
| INE2 | 4 | 000056EE | 00000001 | I | | | 8440 | 8395B |
| INREGBIT | 1 | 00000040 | | U | | | 5169 | 5192 5283 5435 |
| INTEGTYP | 2 | 00003036 | 00000001 | X | X | | 4843 | 4644 4676 4834 |

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| INTRRM | 1 | 00000060 | | U | | | 918 | 987 |
| IOTAB | 1 | 00000A30 | FFFFFFFF | X | X | | 2366 | 5653M 6072M 6089 6145 6705M |
| IPB1 | 4 | 00005A88 | 00000001 | I | | | 8696 | 8558B |
| IPD2 | 2 | 00005C5C | 00000001 | I | | | 8819 | 8706B |
| IPD21 | 4 | 00005C80 | 00000001 | I | | | 8829 | 8822B 8824B |
| IPD3 | 4 | 00005BFE | 00000001 | I | | | 8793 | 8778B 8787B |
| IPD31 | 4 | 00005C0A | 00000001 | I | | | 8796 | 8795M 8801M 8802 |
| IPD33 | 4 | 00005C06 | 00000001 | I | | | 8795 | 8831B |
| IPE3 | 4 | 00005C24 | 00000001 | I | | | 8803 | 8797B |
| IPE31 | 2 | 00005C4C | 00000001 | I | | | 8812 | 8805M 8810M |
| IPH1 | 4 | 00005AD4 | 00000001 | I | | | 8716 | 8715M |
| IPH11 | 4 | 00005AC2 | 00000001 | I | | | 8711 | 8709M 8710M |
| IPH31 | 4 | 00005B82 | 00000001 | I | | | 8760 | 8717B |
| IPH4 | 4 | 00005BB2 | 00000001 | I | | | 8772 | 8761B 8763B 8768B |
| IPH41 | 2 | 00005C52 | 00000001 | I | | | 8815 | 8774B |
| IPH42 | 4 | 00005BC6 | 00000001 | I | | | 8777 | 8776M |
| IPH43 | 4 | 00005BC2 | 00000001 | I | | | 8776 | 8817B |
| IPH44 | 2 | 00005BEE | 00000001 | I | | | 8788 | 8780B 8782B |
| IPJ1 | 4 | 00005ADC | 00000001 | I | | | 8718 | 8813B 8869B 8872B |
| IQB1 | 2 | 00005B26 | 00000001 | I | | | 8736 | 8923B |
| IQC11 | 2 | 00005D40 | 00000001 | I | | | 8884 | 8828B |
| IQC13 | 4 | 00005B08 | 00000001 | I | | | 8729 | 8727M 8728M |
| IQC14 | 4 | 00005B4C | 00000001 | I | | | 8746 | 8745M |
| IQD1 | 2 | 00005B16 | 00000001 | I | | | 8732 | 8721M 8730M |
| IQD11 | 6 | 00005AE8 | 00000001 | I | | | 8721 | 8770B 8887B |
| IQE1 | 4 | 00005B22 | 00000001 | I | | | 8735 | 8733M |
| IQE11 | 6 | 00005B18 | 00000001 | I | | | 8733 | 8758B |
| IQE2 | 6 | 00005B64 | 00000001 | I | | | 8753 | 8718 |
| IQE21 | 4 | 00005B7A | 00000001 | I | | | 8757 | 8753M 8754M 8755M |
| IRA1 | 4 | 00005D1C | 00000001 | I | | | 8871 | 8867B |
| IRB1 | 4 | 00005C8C | 00000001 | I | | | 8833 | 8699B |
| IRD1 | 4 | 00005C98 | 00000001 | I | | | 8836 | 8697B 8834B |
| IRD11 | 4 | 00005D2A | 00000001 | I | | | 8877 | 8837B |
| IRD12 | 2 | 00005D24 | 00000001 | I | | | 8874 | 8839B 8878B |
| IRD13 | 4 | 00005CC4 | 00000001 | I | | | 8848 | 8847M 8855 |
| IRD14 | 4 | 00005CB2 | 00000001 | I | | | 8843 | 8875B 8882B |
| IRF1 | 4 | 00005CDA | 00000001 | I | | | 8854 | 8849B |
| IRF11 | 4 | 00005CF6 | 00000001 | I | | | 8861 | 8858M 8863M 8864 |
| IRG1 | 4 | 00005D0C | 00000001 | I | | | 8866 | 8862B |
| ISB1 | 4 | 00005D4E | 00000001 | I | | | 8891 | 8562B |
| ISB4 | 4 | 00005EA4 | 00000001 | I | | | 8979 | 8892B 8977B |
| ISC2 | 4 | 00005E98 | 00000001 | I | | | 8976 | 8894B |
| ISD5 | 4 | 00005EFC | 00000001 | I | | | 9006 | 8980B |
| ISD51 | 2 | 00005EF6 | 00000001 | I | | | 9003 | 8982B 9007B |
| ISD52 | 4 | 00005EBE | 00000001 | I | | | 8986 | 9004B 9010B |
| ISE3 | 4 | 00005D78 | 00000001 | I | | | 8902 | 8900M 8901M |
| ISE4 | 4 | 00005ECC | 00000001 | I | | | 8990 | 8988M 8997 |
| ISF4 | 4 | 00005ED8 | 00000001 | I | | | 8993 | 8991B |
| ISF41 | 4 | 00005EEE | 00000001 | I | | | 9000 | 8994B |
| ISF42 | 2 | 00005EE4 | 00000001 | I | | | 8996 | 9001B |
| ISG4 | 4 | 00005E38 | 00000001 | I | | | 8952 | 8905B |
| ISG401 | 2 | 00005F10 | 00000001 | I | | | 9012 | 8954B |
| ISG41 | 4 | 00005E4C | 00000001 | I | | | 8957 | 8956M 8961M 8962 9014M 9015B |
| ISH1 | 4 | 00005D94 | 00000001 | I | | | 8909 | 8908M |
| ISH11 | 4 | 00005D88 | 00000001 | I | | | 8906 | 8974B 8998B |
| ISH2 | 4 | 00005DF4 | 00000001 | I | | | 8932 | 8910B |
| ISH3 | 4 | 00005E30 | 00000001 | I | | | 8949 | 8933B 8935B 8941B |
| ISH4 | 4 | 00005E66 | 00000001 | I | | | 8963 | 8958B |
| ISH41 | 2 | 00005E84 | 00000001 | I | | | 8970 | 8964M 8968M 8972 |
| ISJ1 | 4 | 00005DA6 | 00000001 | I | | | 8913 | 8911M |
| ISJ11 | 6 | 00005D9C | 00000001 | I | | | 8911 | 8947B 8950B |
| ISJ2 | 2 | 00005E22 | 00000001 | I | | | 8944 | 8942M |
| ITE1 | 2 | 00005DC6 | 00000001 | I | | | 8920 | 8917M 8918M |
| ITF2 | 4 | 00005DEC | 00000001 | I | | | 8929 | 8925M 8926M 8927M |
| ITF21 | 6 | 00005DD6 | 00000001 | I | | | 8925 | 8914 |
| ITZZ | 6 | 00005DC8 | 00000001 | I | | | 8921 | 8930B |
| IUB1 | 4 | 00005F36 | 00000001 | I | | | 9027 | 8563B |
| IUB13 | 4 | 0000608A | 00000001 | I | | | 9115 | 9112B |
| IUB2 | 4 | 00006036 | 00000001 | I | | | 9093 | 9028B 9030B 9032B |
| IUB3 | 4 | 00006074 | 00000001 | I | | | 9109 | 9107M 9108M |
| IUC1 | 4 | 00005F5C | 00000001 | I | | | 9037 | 9034B |
| IUC11 | 4 | 00005F70 | 00000001 | I | | | 9042 | 9038B |
| IUG2 | 4 | 00006020 | 00000001 | I | | | 9086 | 9043M 9062 |
| IUH2 | 4 | 00006024 | 00000001 | I | | | 9087 | 9059M 9060M 9067M 9068M 9069 |
| IUH21 | 6 | 00005FB4 | 00000001 | I | | | 9059 | 9049 |
| I1B1 | 4 | 00006092 | 00000001 | I | | | 9120 | 9021B 9093 |
| I1B13 | 4 | 00006228 | 00000001 | I | | | 9227 | 9017B 9095B 9097B 9099B 9101B 9116B |
| I1B14 | 4 | 0000623C | 00000001 | I | | | 9232 | 9229B |
| I1B15 | 4 | 0000626E | 00000001 | I | | | 9245 | 9231B 9235B |
| I1B16 | 4 | 0000624C | 00000001 | I | | | 9236 | 9233B |
| I1B17 | 4 | 00006276 | 00000001 | I | | | 9247 | 9243B |
| I1C11 | 4 | 000060BA | 00000001 | I | | | 9130 | 9121 |
| JAF2 | 4 | 000047C6 | 00000001 | I | | | 7238 | 7236B |
| JBUFFER | 4 | 000000CC | 00000001 | I | | | 227 | 169B 188B 470B 3985B 4619B 5777B 7149B |
| JB1 | 4 | 000000D4 | 00000001 | I | | | 229 | 260M 486 |
| JB2 | 4 | 000000E8 | 00000001 | I | | | 239 | 229B |
| JB3 | 4 | 00000112 | 00000001 | I | | | 253 | 155 |
| JGB2 | 4 | 000047FE | 00000001 | I | | | 7270 | 7259B |
| JGE1 | 4 | 000047EA | 00000001 | I | | | 7264 | 7273B |
| JIB2 | 4 | 00004820 | 00000001 | I | | | 7297 | 7289B |
| JIF2 | 4 | 00004816 | 00000001 | I | | | 7293 | 7301B |
| JKB2 | 4 | 00004842 | 00000001 | I | | | 7325 | 7318B |
| JMC2 | 2 | 00004A3A | 00000001 | I | | | 7466 | 7347B |
| JMC3 | 4 | 00004A50 | 00000001 | I | | | 7474 | 7349B |
| JMC31 | 6 | 00004A46 | 00000001 | I | | | 7471 | 7477B |
| JNE1 | 4 | 00004890 | 00000001 | I | | | 7360 | 7443B 7464B |
| JNE5 | 4 | 0000497A | 00000001 | I | | | 7420 | 7361B |

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| JNF2 | 4 | 0000490E | 00000001 | I | | | 7391 | 7363B |
| JNF4 | 4 | 0000496C | 00000001 | I | | | 7416 | 7392B |
| JNF41 | 6 | 00004970 | 00000001 | I | | | 7417 | 7421B |
| JOB1 | 4 | 00004982 | 00000001 | I | | | 7423 | 7357B |
| JOC2 | 4 | 000049E2 | 00000001 | I | | | 7445 | 7424B |
| JOE2 | 6 | 000049CC | 00000001 | I | | | 7440 | 7428B |
| JOG1 | 6 | 000049BC | 00000001 | I | | | 7436 | 7432M 7433M 7434M |
| JPB1 | 4 | 000049F6 | 00000001 | I | | | 7450 | 7438B |
| JQB2 | 4 | 00004A5A | 00000001 | I | | | 7479 | 7451B 7453B |
| JQB4 | 4 | 00004A8E | 00000001 | I | | | 7491 | 7481B |
| JQD3 | 4 | 00004A6A | 00000001 | I | | | 7483 | 7493B |
| JQE1 | 4 | 00004A1A | 00000001 | I | | | 7458 | 7454M 7455M 7456M |
| JQE2 | 4 | 00004A22 | 00000001 | I | | | 7460 | 7489B |
| JQE3 | 6 | 00004A84 | 00000001 | I | | | 7488 | 7484M 7485M 7486M |
| JRB3 | 6 | 000048AA | 00000001 | I | | | 7366 | 7418B |
| JRC2 | 4 | 000048E8 | 00000001 | I | | | 7380 | 7371B |
| JRC21 | 4 | 000048CA | 00000001 | I | | | 7373 | 7381B 7389B |
| JRC22 | 4 | 000048C6 | 00000001 | I | | | 7372 | 7387B |
| JRC3 | 6 | 000048CE | 00000001 | I | | | 7374 | 7366M 7367M 7372M 7380M 7383 7388M |
| JRC4 | 6 | 000048F0 | 00000001 | I | | | 7383 | 7369B |
| JRC41 | 4 | 000048FA | 00000001 | I | | | 7385 | 7383M |
| JRF4 | 4 | 000048D4 | 00000001 | I | | | 7375 | 7403B |
| JRF41 | 4 | 000048E0 | 00000001 | I | | | 7378 | 7343 7351B 7472B |
| JSE2 | 4 | 00004946 | 00000001 | I | | | 7405 | 7399B |
| JSE21 | 4 | 0000493A | 00000001 | I | | | 7401 | 7406B 7414B |
| JSE22 | 4 | 00004936 | 00000001 | I | | | 7400 | 7412B |
| JSE3 | 4 | 0000493E | 00000001 | I | | | 7402 | 7393M 7394M 7395M 7400M 7405M 7408 7413M |
| JSE4 | 6 | 0000494E | 00000001 | I | | | 7408 | 7397B |
| JSE41 | 4 | 00004958 | 00000001 | I | | | 7410 | 7408M |
| JWB2 | 4 | 00004AF8 | 00000001 | I | | | 7533 | 7509 |
| JWD1 | 4 | 00004ABE | 00000001 | I | | | 7519 | 7513B |
| JWF2 | 4 | 00004B86 | 00000001 | I | | | 7566 | 7523B |
| JWG3 | 4 | 00004AFC | 00000001 | I | | | 7534 | 7527B |
| JWG31 | 4 | 00004B00 | 00000001 | I | | | 7535 | 7568B |
| JWH1 | 4 | 00004B40 | 00000001 | I | | | 7549 | 7525B |
| JWH2 | 4 | 00004AF0 | 00000001 | I | | | 7531 | 7528M 7529M |
| JWH21 | 6 | 00004AE2 | 00000001 | I | | | 7528 | 7547B |
| JWH3 | 4 | 00004AF4 | 00000001 | I | | | 7532 | 7564B |
| JWJ3 | 6 | 00004B36 | 00000001 | I | | | 7546 | 7541M 7542M 7543M 7544M |
| JWK1 | 4 | 00004B6A | 00000001 | I | | | 7559 | 7552M 7553M 7554M 7557M |
| JWK12 | 4 | 00004B66 | 00000001 | I | | | 7558 | 7556B |
| JWK3 | 4 | 00004ABA | 00000001 | I | | | 7518 | 7520B |
| JYD1 | 4 | 00004BC2 | 00000001 | I | | | 7598 | 7587B |
| JYF2 | 4 | 00004C18 | 00000001 | I | | | 7619 | 7602B |
| JYH1 | 4 | 00004BF6 | 00000001 | I | | | 7610 | 7607M 7608M |
| JYH11 | 6 | 00004BE6 | 00000001 | I | | | 7607 | 7620B |
| JYH12 | 4 | 00004BE2 | 00000001 | I | | | 7606 | 7604B |
| JYJ3 | 4 | 00004C0E | 00000001 | I | | | 7615 | 7613M |
| JZB1 | 4 | 00004BAC | 00000001 | I | | | 7591 | 7583 7599B 7617B |
| KBB2 | 4 | 00004CA2 | 00000001 | I | | | 7673 | 7635 |
| KBD1 | 4 | 00004CB0 | 00000001 | I | | | 7676 | 7639B |
| KBD2 | 4 | 00004CC0 | 00000001 | I | | | 7680 | 7644B 7649B 7903B 7904B |
| KBD21 | 4 | 0000501A | 00000001 | I | | | 7902 | 7755B |
| KBD3 | 4 | 00004CC6 | 00000001 | I | | | 7683 | 7671B 7679B |
| KBD31 | 6 | 00004D14 | 00000001 | I | | | 7702 | 7646B 7687B 7757B 7828B |
| KBD4 | 6 | 00004CA6 | 00000001 | I | | | 7674 | 7684B |
| KBE1 | 4 | 00004CCE | 00000001 | I | | | 7686 | 7677B |
| KBF3 | 4 | 00004D4C | 00000001 | I | | | 7715 | 7692B |
| KBF4 | 4 | 00004D68 | 00000001 | I | | | 7722 | 7690B |
| KBG2 | 6 | 00004D2A | 00000001 | I | | | 7707 | 7694B |
| KBG21 | 6 | 00004D42 | 00000001 | I | | | 7712 | 7707M 7708M 7709M 7710M 7718M 7719M |
| KBG22 | 6 | 00004D34 | 00000001 | I | | | 7709 | 7720B |
| KBG3 | 6 | 00004D70 | 00000001 | I | | | 7725 | 7716B |
| KBG31 | 4 | 00004D88 | 00000001 | I | | | 7730 | 7725M 7726M 7727M 7728M |
| KBH1 | 6 | 00004CF4 | 00000001 | I | | | 7695 | 7651B 7663B 7713B 7731B 7776B 7866B |
| KBH3 | 6 | 00004D58 | 00000001 | I | | | 7718 | 7723B |
| KCB1 | 4 | 00004DE0 | 00000001 | I | | | 7754 | 7734B 7748B |
| KCB11 | 4 | 00004D90 | 00000001 | I | | | 7733 | 7640B |
| KCB12 | 4 | 00004DD0 | 00000001 | I | | | 7750 | 7742B |
| KCB13 | 4 | 00004DD8 | 00000001 | I | | | 7752 | 7751M |
| KCE11 | 6 | 00004E0C | 00000001 | I | | | 7765 | 7900B |
| KCE112 | 4 | 00004DC8 | 00000001 | I | | | 7747 | 7746M |
| KCF2 | 2 | 00004E42 | 00000001 | I | | | 7778 | 7769B |
| KCF21 | 4 | 00004E5C | 00000001 | I | | | 7785 | 7783M 7784M |
| KCF4 | 6 | 00004EA2 | 00000001 | I | | | 7804 | 7763 |
| KCG11 | 4 | 00004E32 | 00000001 | I | | | 7773 | 7801B |
| KCG2 | 2 | 00004E72 | 00000001 | I | | | 7790 | 7787M 7788M |
| KCH2 | 4 | 00004E8A | 00000001 | I | | | 7797 | 7796M |
| KCH21 | 2 | 00004E74 | 00000001 | I | | | 7791 | 7809B |
| KCH4 | 4 | 00004EB8 | 00000001 | I | | | 7808 | 7804M 7805M 7806M |
| KDB1 | 4 | 00004EC0 | 00000001 | I | | | 7811 | 7762B |
| KDC4 | 4 | 00004F4A | 00000001 | I | | | 7847 | 7844M 7845M |
| KDC41 | 6 | 00004F3A | 00000001 | I | | | 7844 | 7811 |
| KDE31 | 2 | 00004F08 | 00000001 | I | | | 7830 | 7814B |
| KDF3 | 2 | 00004F34 | 00000001 | I | | | 7841 | 7833M |
| KDG11 | 4 | 00004ED0 | 00000001 | I | | | 7815 | 7842B 7849B |
| KEB1 | 4 | 00004F56 | 00000001 | I | | | 7851 | 7760B |
| KEC2 | 4 | 0000500E | 00000001 | I | | | 7898 | 7852B |
| KEF2 | 2 | 00004F9C | 00000001 | I | | | 7868 | 7859B |
| KEF21 | 4 | 00004FB6 | 00000001 | I | | | 7875 | 7873M 7874M |
| KEF31 | 6 | 00004FF0 | 00000001 | I | | | 7891 | 7853 |
| KEG1 | 4 | 00004F8C | 00000001 | I | | | 7863 | 7889B |
| KEG21 | 2 | 00004FC8 | 00000001 | I | | | 7879 | 7876M 7877M |
| KEG3 | 4 | 00005006 | 00000001 | I | | | 7895 | 7891M 7892M 7893M |
| KEH2 | 4 | 00004FE0 | 00000001 | I | | | 7886 | 7885M |
| KEH21 | 2 | 00004FCA | 00000001 | I | | | 7880 | 7896B |
| KFB2 | 4 | 00004C98 | 00000001 | I | | | 7668 | 7642B |

X390 3.1.04 2012/08/17 13.13

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Symbol    Length    Value     Id      Type Asm  Program    Defn  References                          X390 3.1.04  2012/08/17 13.13

KFE11          4 00004C90 00000001  I                    7665  7652M 7659
KFE12          4 00004C94 00000001  I                    7666  7658M
KH10           2 000001BE 00000001  H H                   324  2583  4812  6342  7775  7827  7865
KH15           2 000001C0 00000001  H H                   325  3900  3941  4451  4494
KH2            2 000001B4 00000001  H H                   319  1464  3659  4209  4610  6929
KH20           2 000001C2 00000001  H H                   326  4273  4332
KH290          2 000001C4 00000001  H H                   327  3436  4862
KH324          2 000001C6 00000001  H H                   328  7218
KH4            2 000001B6 00000001  H H                   320  4707  4731  4733  4735  4759  5879  5880  5881  6465
KH5            2 000001B8 00000001  H H                   321   176  1167  1578  1717  1824  2855  2982  3016  3139  3377
                                                               3476  3569  3731  3880  3899  4745  4985  4999  5354  5699
                                                               5995  7048  7076  7355  7483  7961  8091  8111  8156  8170
                                                               8241  8321  8330  8600  8614  9061  9196  9247
KH614          2 000001C8 00000001  H H                   329  4215  7595  7964
KH8            2 000001BA 00000001  H H                   322  1363  2793  8773
KH9            2 000001BC 00000001  H H                   323  3364
KIB2           4 00005044 00000001  I                    7929  7920B
KIF2           4 00005038 00000001  I                    7925  7930B 7932B
KIF21          4 00000784 00000001  I                     868   859B
KIF22          4 00000760 00000001  I                     857   862B  866B
KIF24          4 000007BE 00000001  I                     885   876B
KIF25          4 0000079A 00000001  I                     874   879B  883B
KOC14          4 00004380 00000001  I                    6709  6701
KOC15          8 00004384 00000001  C C                  6710  6697M
KOC16          2 0000438C 00000001  H H                  6711  6700M
KONSUM         2 000005F6 FFFFFFFF  H H                  2346  4611M 4612  8244M 8246  8603M 8605
KP1            2 0000074C 00000001  P P                   838   783
KUB2           4 00005076 00000001  I                    7958  7948B
KUE1           4 00005062 00000001  I                    7952  7962B
KUE2           4 00005084 00000001  I                    7964  7953B
KWE1           4 00005140 00000001  I                    8031  7988B
KWE3           4 00005200 00000001  I                    8077  8032B
KWF2           4 00005184 00000001  I                    8048  8034B
KWF21          4 000051D0 00000001  I                    8065  8049B
KWF22          4 000051F4 00000001  I                    8073  8069M 8070M 8071M
KWF23          6 000051BC 00000001  I                    8060  8075B
KWG1           4 00005154 00000001  I                    8036  8098B
KWG11          6 0000524C 00000001  I                    8097  8117B
KWG12          4 00005150 00000001  I                    8035  8016B 8063B
KWG13          4 00005114 00000001  I                    8015  7995B
KWG2           4 00005190 00000001  I                    8051  8079B
KWH1           4 00005162 00000001  I                    8039  8037M
KWH2           6 000051B6 00000001  I                    8059  8054M 8055M 8056M 8057M
KWJ3           6 00005134 00000001  I                    8027  7981  7985B 8025B 8046B
KXB1           4 0000520C 00000001  I                    8081  7989B
KXB3           4 0000525E 00000001  I                    8103  8082B
KXC2           4 00005230 00000001  I                    8090  8084B 8088B
KXC4           4 0000527A 00000001  I                    8110  8104B 8108B
KXG2           4 00005256 00000001  I                    8100  8093B
KXG4           4 0000529A 00000001  I                    8119  8113B
KXH2           4 00005244 00000001  I                    8095  8101B
KXH21          4 00005292 00000001  I                    8116  8106B
KXH22          4 00005248 00000001  I                    8096  8086B
KXH23          4 0000528E 00000001  I                    8115  8120B
KYB2           4 00005124 00000001  I                    8021  7991B 7993B
KYF1           6 000050D6 00000001  I                    7999  7997B
KYF11          4 0000511C 00000001  I                    8018  7999M 8005
KYF12          4 00005120 00000001  I                    8019  8004M
LABARRM        1 0000000C           U                     921  1003
LAT            1 0000000C           U                     131  1020  4931  5060  5069  5619  5641  5643  5674  5966  5967
                                                               6397  6548  6670  7615  7665  8018  8039  9090  9134  9155
LATAB          4 0000061C FFFFFFFF  A A                  2357  2358  2777  3207  3445  3830  3901  4075  4965  5006  5651
                                                               5717  6576  6672  6695  6736  7700  7820  8043  9083  9131
                                                               9152
LATBEG         1 0000006C           U                    2129  1777  2130
LATNR          1 0000001C           U                    2128  2129
LATRES         4 00000EB8 00000001  I                    1765  3449B 3884B 6540B 6667B 7611B 8036B
LDRET          4 00000E74 00000001  F F                  1702  1665M 1699  1773M 1779
LDVWPLC        4 00000DF0 00000001  I                    1665  6416B
LDVWR          4 00000E6E 00000001  I                    1699  1684B 1695B
LDVW1          4 00000E3A 00000001  I                    1686  1668B
LDVW1A         4 00000E4E 00000001  I                    1691  1687B
LDVW2          4 00000E64 00000001  I                    1697  1692B
LDVW3          4 00000E2E 00000001  I                    1682  1670B 1679B 1690B
LDVW4          4 00000E2A 00000001  I                    1681  1676B
LISTE          4 00004432 00000001  I                    6802  6801B
LN             2 000000A2 FFFFFFFF  R A                  2130  1765  1767M 1771  1778M 2790  2792  2794M 3450  5118  6541
                                                               6546  6668  6676  7612  7613  8037  8045
LNG            1 00000002           U                    2068  1397
LOADPP         1 000000FC           U                    2511  6709B
LOADR1         4 00004050 00000001  I                    6382  5885B 6341B
LOADR1R        4 00004188 00000001  F F                  6478  5908M 5920  6382M 6399  6404M 6449
LOADR2         6 00004064 00000001  I                    6387  6384B
MAXCH          4 00000902 00000001  I                    1051  1517B 2682B 3715B 4168B 4327B 4640B 6583B 7431B 7447B 7537B
                                                               7551B 8053B 8067B 8389B 9046B 9176B
MAXCH1         4 00000934 00000001  I                    1066  1056B 1059B 1061B
MAXOVERF       2 00000A62 FFFFFFFF  H H                  2389  1058  2390
MCHSAV         4 0000093C 00000001  F F                  1071  1051M 1066
MOVEOPDK       4 00000E80 00000001  I                    1717  2584B 3648B 3881B 4647B 5113B 5850B 6520B 6523B 6539B
MOVEOPTK       4 00000E78 00000001  I                    1712  2578B 2617B 3787B 3836B 3876B 4016B 4029B 4127B 4145B 4447B
                                                               4452B 4654B 4810B 4886B 5144B 5215B 6501B 6554B 6589B 7117B
                                                               7134B 7174B 7264B 7266B 7293B 7925B
MOVERET        2 00000E84 00000001  I                    1718  1713B
NDECK          1 00000020           U                    2086   721   750   752
NEXTERR        4 000000C0 FFFFFFFF  A A                  2141   403   421   433   440M  446M
NLOAD          1 00000040           U                    2083   721   750  4224
NOASSIGN       1 00000008           U                    5168  5330
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Symbol    Length   Value     Id      Type Asm  Program    Defn  References                   X390 3.1.04  2012/08/17 13.13

NOTEST         1 00000004            U                    2110  1093  3130  4377  4387  4666
NUMBBL         1 00000A59 FFFFFFFF  X X                   2384   257   259M 4521M 4533
NUMP           1 00000003            U                     909   940   946   971   988M
NXTOPT         4 00000132 00000001  I                      271   473B 2649B 3494B
NX1            4 00000150 00000001  I                      280   275B  306M  471   495
NX2            4 00000162 00000001  I                      288   280B
NX3            4 000001A8 00000001  I                      312   278B
NX4            4 00000196 00000001  I                      307   157
OERR21         1 00000220            U                    2539  1033B
OERR22         1 00000224            U                    2537  5243B 6006B
ONEENTRY       2 00000A56 FFFFFFFF  H H                   2378   559   984  1006  1194  1310  1332  1438  1460  1541  1652
                                                                2379  2640  2660  2665  2669  2672  2718  3030  3096  3352
                                                                3355  3475  3600  3608  3713  4165  4166  4269  4314  4323
                                                                4348  4365  4491  4495  4496  4500  4560  4638  4677  4680
                                                                4689  4718  4835  4838  5013  5089  5434  5610  5807  6360
                                                                6389  6438  6454  6464  6580  7046  7074  7429  7445  7535
                                                                7549  7605  7848  8009  8035  8051  8065  8089  8109  8173
                                                                8183  8193  8262  8342  8387  8570  8589  8628  8704  8747
                                                                8769  8835  8886  8903  8978  9042  9044  9047  9052  9172
                                                                9174  9177  9181
OPBUFB         4 00000610 FFFFFFFF  A A                   2354   271   308M
OPDADR         2 00000A4C FFFFFFFF  H H                   2372  1562M 1563  1633  6121  6133  6141M 6142M 6143
OPDLN          2 00000A4E FFFFFFFF  H H                   2373  1565M 3902  4074  5594  6694
OPDPBN         2 00000A4A FFFFFFFF  H H                   2371  1561M 3945  5591
OPDREC         4 000007D2 00000001  I                      931  1649B 1666B 2634B 2839B 2965B 3231B 4151B 4331B 4397B 4493B
                                                                4633B 4922B 5051B 5212B 5285B 5582B 5731B 6165B 6414B 7028B
                                                                7352B 7354B 7521B 7600B 7647B 7688B 7758B 7986B 8153B 8155B
OPDREC1        4 0000081E 00000001  I                      960   935B
OPDREC3        4 000008A2 00000001  I                     1003   961B
OPDREC4        4 0000086E 00000001  I                      984   956B  977B  979B 1008B 1016B
OPDREC5        4 000008CE 00000001  I                     1014  1011M 1012M
OPDREC6        4 000008F2 00000001  I                     1031   980
OPDTEST        4 00000F50 00000001  I                     1842  2602B 2696B 2832B 2956B 3220B 4140B 4191B 4443B 4601B 4913B
                                                                5044B 5275B 5849B 7019B 7200B 7344B 7510B 7584B 7636B 7982B
OPERAND        1 00000001            U                    2069   165   175  1842  1849  1853  1856  2572  3332  3779  3821
                                                                3851  3870  3908  4027  4050  4054  4107  4123  4208  4614
                                                                4858  4883  4893  5079  5138  5185  5307  5467  5520  5524
                                                                5572  5803  5819  5891  6178  6493  6659  6727  6731  6790
                                                                6796  6968  6993  7111  7135  7172  7258  7288  7317  7919
                                                                7947  8144  8455
OPREL          4 000001B0 00000001  F F                    315   272   312M
OPTABS         4 000000FC FFFFFFFF  F F                   2163   274
OPTCO          4 0000016C 00000001  F F                    293   283   499
OUTAREA2       4 000000AC FFFFFFFF  F F                   2133   766   776M
PAGEHD1      121 0000010C FFFFFFFF  C C                   2172  2173  2177
PAGEHD2      121 00000185 FFFFFFFF  C C                   2182  2183
PAGEHD3      121 000001FE FFFFFFFF  C C                   2189  2190
PARAM          1 000000F0            U                     926   940
PARCOUNT       2 00003976 00000001  H H                   5830  5740M 5741  5748M
PBNHDL         2 00000D5C 00000001  I                     1597  3791B 3893B 4089B
PBNHDL1        4 00000D72 00000001  I                     1607  1600B
PBNHDL2        4 00000D7A 00000001  I                     1609  1602B
PBNP           1 00000002            U                     910   947   965   986M  996M
PBT            1 0000000B            U                     130  1135  4944  5075  5621  5643  5674  5966  7666  8019  8306
                                                                8312
PBTAB1       255 00000478 FFFFFFFF  C C                   2269  2270
PBTAB2       510 00000278 FFFFFFFF  C C                   2267  1611M 1614
PBTAB3         1 00000630 FFFFFFFF  C C                   2364  1055  1057M 4088M
PIDENT         4 000000B0 FFFFFFFF  C C                   2134   782
PLACE14        4 000005BC FFFFFFFF  F F                   2342   715M  744
PLPRST         4 00000D9C 00000001  I                     1629  3346B 4052B 4125B 5522B 6661B 6729B
PLPRST1        4 00000DCE 00000001  I                     1647  1636B
PLPRST3        4 00000DEA 00000001  I                     1654  1640B 1645B 1648B 1651B
PLPRST4        4 00000DC4 00000001  I                     1642  1632B
PPCODE         4 000008DA 00000001  I                     1020   946M  947M  948
PRECMASK       1 00000A58 FFFFFFFF  X X                   2381   703  2382
PRELPOOL       1 00000278 FFFFFFFF  C C                   2207  2140  2141  2208  2266
PROC           1 00000004            U                    2065  3853
PROCM          1 000000C0            U                     924   936   976
PROCTEST       4 00000F16 00000001  I                     1810  1803B
PROCTES1       4 00000F22 00000001  I                     1814  1799B
PROCWPS        1 00000900 00000001  X X                   1036   978  5581M 5583M 5730M 5732M
PROGARR        4 00000EAC 00000001  I                     1750  1742B
PROLOG         1 000000E0            U                    2497  1022B 3812B
PROLOGFP       1 000000DC            U                    2495  5738B
PROLOGP        1 000000DC            U                    2494  2495
PROLPBN        1 000000A9            U                    2450  1021M 5642M 5673M 5725M 5965M
PROLREG        1 000000A0            U                    2443  5643M 5674M 5966M
PUNCHOUT       6 000006AA 00000001  I                      779   764B
PUT$1          4 00000670 00000001  I                      755   777B
PUT1           2 00000674 00000001  I                      758   754B
RADRFREM       1 00000001            U                     590   608   611
RANDP          2 00000720 00000001  H H                    820   826
REALTYPM       1 00000002            U                    4597  4690
REGADRM        1 00000080            U                     929   988  1650  5805
RELADR         4 00004154 00000001  I                     6454  6432B
RETADR         4 00000578 FFFFFFFF  F F                   2341   530M  565   852M  863M  865   880M  882   888  1128M 1136
                                                                1155M 1174  1190M 1197  1228M 1247M 1275M 1306M 1308  1378M
                                                                1384M 1434M 1436  1502M 1511M 1514  1519  1852M 1860  8789M
                                                                8791  8850M 8852  8959M 8971  9159M 9201  9205M 9220
RETADR3        4 00000A94 00000001  F F                   1213  1202M 1204
RETARR2        4 00000F4C 00000001  F F                   1828  1819M 1825
RETPROG        1 000000E4            U                    2499  5095B
RET69          4 00006280 00000001  F F                   9251  9227M 9248
RET691         2 00006284 00000001  H H                   9252  9236M 9242
RII            2 00000A46 FFFFFFFF  H H                   2369   540M  548   608   611M  873   887M  990M 1193M 1200  1304
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Symbol    Length   Value     Id       Type Asm  Program   Defn  References                     X390 3.1.04  2012/08/17 13.13

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                                                                8716  8729M 8746M 8777  8796  8802M 8848  8855M 8861  8864M
                                                                8902M 8909  8957  8962M 8990  9033  9037  9041M 9073M 9109M
                                                                9167  9171M
RIIADRM        1 00000001          U                     922    990  1653  5090  5317  5808  6455
RIR            2 00000A48 FFFFFFFF  H H                  2370    545   563M  596   601M  856   870M 1432  1437M 1459M 1468
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                                                                7823M 7839M 7898M 8190  8215M 8499M 9158  9162  9166M 9191M
                                                                9210M
RLDFLAG        1 0000000C          U                     681    828
RLDT           1 00000718 00000001  X X                   816    686
ROPTB          4 00000614 FFFFFFFF  A A                  2355    307   309M
ROUTINE1       6 00000984 00000001  I                    1118   1205B 1230B 1249B 1540B 1542B 1683B 2625B 3471B 3573B 3660B
                                                                4265B 4527B 4554B 5203B 5353B 5603B 5994B 7416B 7482B 7534B
                                                                7606B 7717B 7803B 8050B 8229B 8253B 8283B 8320B 8333B 8619B
                                                                9066B
ROUTINE2       4 000009DE 00000001  I                    1155   7051B 8094B 8218B 8232B 8268B
ROUTINE3       4 00000A3A 00000001  I                    1190   1005B 1157B 1277B 1536B 3474B 4268B 5363B 5613B 7420B 7491B
                                                                7566B 7619B 7722B 8077B 8255B 8316B 8327B 8621B
ROUTINE4       4 00000A98 00000001  I                    1228   7056B 8100B 8203B 8228B 8276B
ROUTINE5       4 00000AAC 00000001  I                    1247   7079B 8119B 8634B 8868B 8995B
ROUTINE6       4 00000AE8 00000001  I                    1275   7084B 8114B 8642B 8871B 9000B
ROUTINE7       2 00000AF8 00000001  I                    1295   3181B 3595B 4504B 5408B 6187B 6229B 6272B 7075B 8110B 8631B
ROUTINE8       2 00000B3A 00000001  I                    1325    541B 3492B 4164B 4364B 4414B 8116B 8580B 8584B 8597B 8623B
                                                                8639B 8720B 8916B 9056B 9127B
ROUTINE9       4 00000B96 00000001  I                    1378    881B 1307B 3628B 4163B 4371B 8790B 8799B 8851B 8865B 8949B
                                                                8960B 8992B 9036B 9040B 9055B 9126B 9170B
ROUTIN10       4 00000B8E 00000001  I                    1362    550B  610B 1203B 6281B 7998B
ROUTIN11       2 00000C06 00000001  I                    1421   6210B 6317B 7047B 8090B 8192B 8265B
ROUTIN12       4 00000C50 00000001  I                    1453    621B 3491B 6216B 6226B 6296B 8096B 8178B 8238B 8257B 8273B
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ROUTIN13       4 00000CAE 00000001  I                    1502    864B 1435B 8225B 9147B 9165B 9185B
ROUTIN14       2 00000CAC 00000001  I                    1490    547B  600B 6266B 6291B 9161B
ROUTIN15       4 00000CFC 00000001  I                    1535    532B  603B 3486B 4172B 4407B 6184B 6209B 6263B 6316B 7764B
                                                                7812B 7854B 8175B 8240B 8582B 8599B 8719B 8915B 9050B 9122B
                                                                9142B 9180B
ROUT151        4 00000D1C 00000001  I                    1544   1538B
RSRCB          4 00000604 FFFFFFFF  A A                  2351    253   254M
RUTI           4 000005C0 FFFFFFFF  F F                  2343    989M 1210M 1252M 1380  1678M 1688M 3194M 3613M 3615  4271M
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                                                                9078M
RUTIADR        1 00000020          U                     912    989M
RUTR           4 000005E4 FFFFFFFF  F F                  2344    562M  598  1159M 1504  1681M 6354M 7774M 7826M 8492M 9215M
R0             1 00000000          U                    9358    730M  731   735   737   738  2679  2704B 2755M 2772B 2817B
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                                                                6769  6867M 6868M 6869M 6870M 6871
R1             1 00000001          U                    9359    200M  201   202M  203M  206M  207M  208M  209   307M  308
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                                                                3193M 3194  3198  3207M 3208M 3209  3252  3280  3309  3337M
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                                                                4093M 4096M 4243M 4244M 4245M 4246  4253  4274M 4275M 4276M
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                                                                4528M 4529M 4530  4541M 4542  4544M 4545M 4546  4553  4658M
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Symbol    Length     Value      Id    Type Asm  Program    Defn  References                        X390 3.1.04  2012/08/17 13.13

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R11              1 0000000B         U                      9369   154M  203   205   207  2580M 3436M 3525  3535  3551  3996M
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R12              1 0000000C         U                      9370   209M  210B 2571U 2600M 2694M 2710M 2728  2784  2808  2830M
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                                                                 3331M 3417  3464  3747  3778U 3820U 3841M 3842B 3850U 3860M
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R13              1 0000000D         U                      9371   148U 2686  2868  2892  2914  3008  3109  3133  3244  3272
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SAVECIRI          4 000035C2 00000001  I              5442  5349B 5400B 5425B
SAVELT            4 00000748 00000001  F F             837   749M  763
SAVOUTA           4 000000A8 FFFFFFFF  F F            2132   720   762M  767  3811M
SAVRT             4 000008FC 00000001  F F            1035   934M  952   991
SAVTRREI          4 000005B8 00000001  F F             624   595M  615  1743M 1747  1751M 1790M 1807
SCHDL             4 00000954 00000001  I              1086  4113B 4129B 4861B 5009B 5527B 6919B
SCHDLR            4 00000980 00000001  F F            1102  1086M 1099
SCHDL1            2 00000978 00000001  H H            1097  1092M 1094B
SCPTAB            4 000001EC 00000001  A A             350   209  2600  2694  2710  2830  2954  3218  3331  3841  3860
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SEMCNT         2 0000009C FFFFFFFF  H H            2125   436   443  1087M 1092
SERRSP         4 0000039E 00000001  I               421  1063B
SERR1          4 000003C8 00000001  I               433   461B 1637B 1774B 1814B 1857B 2609B 3794B 4218B 4237B 4463B
                                                              4627B 5227B 5370B 5381B 5480B 5706B 5973B 5978B 6035B 6136B
                                                              6534B 6563B 6626B 7668B 7680B 8021B
SERR2          4 00000358 00000001  I               396  1744B 3224B 5020B 5084B 6970B 7087B 7467B 7474B 7514B 7588B
                                                              8373B 8463B 8471B
SERR3          4 00000360 00000001  I               401   192B 1642B 1804B 4037B 4109B 4472B 5219B 5788B 5815B 5896B
                                                              6497B 6509B 6517B 6792B 6896B 7319B 7325B 8530B
SERR4          4 0000034C 00000001  I               390  1845B 2574B 3783B 3872B 4865B 4890B 5140B 5485B 6995B 7000B
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                                                              8452B
SOURCEB        4 00000600 FFFFFFFF  A A            2350   228   255M 4520
SPBNST         2 00000A5C FFFFFFFF  H H            2386   422   558   968   985M  986  1053  1120  1171  1401  1609
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SPECTEST       4 00000084 00000001  I               185   189B  196B 4057B 4090B 4211B 4214B 4216B 5810B 5814B 5893B
                                                              6180B 6311B 6367B 7201B
SPIC           1 00000040           U              2105   468
SRCECO         4 000000EC 00000001  F F             240   232   490
SRCE1ADD       4 000000C8 FFFFFFFF  F F            2143  2348
SRCE1S         4 000000E0 FFFFFFFF  F F            2155  2156
STACKAPI       4 00000D4A 00000001  I              1578  1850B 5017B 5224B 5818B 5903B 6500B 6851B 7300B 7955B
STACKOFL       4 00000428 00000001  I               461   178B 1580B 1719B 4814B
STACKST        4 00003970 00000001  F F            5828  5574M 5575  5577M 5691  5709  5714  5749
STC            4 000001E4 00000001  A A             340  3996  5117  6514  6878
STENTRY        4 000031FC 00000001  F F            5027  4961M 4984  4986M
STPROCM        1 00000040           U               925   938
STRDCIRI       1 000035D0 00000001  C C            5447  5314  5443M
STRDNAME       1 00000A73 FFFFFFFF  C C            2400  3895  3898  3915  3919  3922  3923  3981M 3988M
STRDP          2 000035CE 00000001  H H            5446  5313  5442M
STRETURN       4 00000624 FFFFFFFF  F F            2360  1629M 1654  1844M 1848  3980M 3993
STSLPAR        2 00003974 00000001  H H            5829  5578M 5684  5686M 5687  5697  5742
SUBSCOPT       1 00000040           U              2063  4256  4259  4278  4539  7026  8151
SUBSTART       4 00000048 00000001  I               165   149   151U
SUTABC       768 00000AA8 FFFFFFFF  C C            2402  2403  3557
SUTABCA        4 00000620 FFFFFFFF  A A            2359  3359  3367M 3505  3560M 4523
SWREL          2 000001D6 00000001  H H             334  8249M 8348M 8394  8440M 8527M 8535  8537M 8615M 8673  8681M
SWVAL          2 000001D4 00000001  H H             333  7144M 7178M 9031
SYSACTF        2 0000417A 00000001  H H            6471  6085M 6090  6096M 6110M 6115M
SYSIN          4 00000418 FFFFFFFF  F F            2214  2590
SYSUT1         4 00000578 FFFFFFFF  F F            2277  2339
TARITHM        4 00000E8C 00000001  I              1739  2613B 2697B 2833B 2957B 4141B 4192B 4602B
TERMNTE        1 0000010E           U              2517  3856B
THUNKADR       4 00003978 00000001  F F            5831  5753M 5757
TRACE          1 00000100           U              2513  1096B
TRINRE         4 000004A6 00000001  I               530  3019B 3037B 5396B 6172B 6415B 7824B 7899B 8564B 8567B 9022B
                                                              9241B 9246B
TRREIN         4 0000054E 00000001  I               595  4154B 4400B 4636B 5407B
TRREIN1        4 0000056A 00000001  I               602   597B
TRREIN3        4 00000582 00000001  I               607   604M  605M
TRREIN4        6 000005A4 00000001  I               618   602
TRREIN5        2 000005AE 00000001  I               620   618M
TRREIN6        4 00000586 00000001  I               608   622B
TRREIN8        4 000005B0 00000001  I               621   599B
TRREIN9        4 00000596 00000001  I               612   609B
TXTT           1 000006F2 00000001  X X             797   719   788
TYPETEST       4 000001D0 00000001  F F             332  5471  5472
TYPF           1 00000000           U               911   987M
TYPS           1 00000001           U               908   933   936   938   951   960   976   992   994  1003  1007
UPLACE         2 00000A70 FFFFFFFF  H H            2398  8167M 8176M 8200M 8223M 8235M 8270M 8360  8488M 8489  8502
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USPEI2         2 00000A66 FFFFFFFF  H H            2393  4652  4671  4673M 4705  4708M 4729  4829M 4830M 4831  4833M
USPEI4         2 00000A68 FFFFFFFF  H H            2394  4699  4712  4716M 4727M 4744  4747M 4825M
VALUCALL       1 00000118           U              2524  4005B
VALUEM         1 00000020           U               928   960
VPLACE         1 00000A72 FFFFFFFF  C C            2399   542   568   604   618  1119M 1122M 1162  1195M 1207  1256
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WA2_B          4 00002334 00000001  I              3748  2653M 3300  3565M 3566M 3583M 3619  3633  3645M
WA2_C          2 0000233C 00000001  H H            3753  2654M 3569  3650  3652M
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XFCOLON        1 00000007          U                 9321  6920
XFCOMMA        1 00000025          U                 9330  1689  3930  4623  4674  4803  5872
XFDELTA        1 00000029          U                 9350  3909  4955  6553
XFEND          1 0000002C          U                 9351  4055
XFEQUAL        1 00000010          U                 9324  8385  8637
XFFOR          1 00000018          U                 9347  5778
XFGOTO         1 00000017          U                 9346  5782  7237
XFIF           1 0000001D          U                 9348  5780
XFLBRAC        1 00000006          U                 9320  3906  7152  7265
XFLT           1 00000011          U                 9325  8396  8441
XFMINUS        1 00000001          U                 9317  7139  8362  8506  8521  8647  8664  8670
XFPLUS         1 00000000          U                 9316  4069
XFPOWER        1 00000005          U                 9344  7176  8161  9020
XFRBRAC        1 00000026          U                 9331  4030  5689  6150
XFRSQBR        1 00000028          U                 9332  4198  4225  4606
XFSCOLON       1 0000000B          U                 9323  5525  6772  6860
XFSLASH        1 00000003          U                 9319  8188  8366
XFZETA         1 0000002F          U                 9352   166   185  3982  4615  5775  7146
YPLACE         2 00000A6E FFFFFFFF  H H              2397  7358M 7359M 7366  7375M 7376  7395  7425M 7426M 7432  7448M
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ZEROHW         2 00000A50 FFFFFFFF  H H              2374   870   887  1196  1694  2654  3394  3528  3562  3673  3981
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Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.13

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Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)            X390 3.1.04  2012/08/17 13.13

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| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
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Con Source       Members                                                                          X390 3.1.04  2012/08/17 13.13

  1 SYS1.MACLIB
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  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
               IEX5000C IEX50002 IEX50003 IEX50004 IEX50005 IEX50006
  4 SYSD.ALGOLF.MACLIB
               IEXCGEN  IEXCHAR  IEXENTRY WAEXT    WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
               FSAREA
  6 SYS1.AMODGEN
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X390 3.1.04 2012/08/17 13.13

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text |
|---|---|---|---|---|---|---|---|---|---|---|
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| 148 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 13 | 00DA8 | 9239 | WORKAREA,R13 |
| 150 | | DROP | | | | | 15 | | | R15 |
| 151 | | USING | Ordinary | 00000001 | 00000048 | 00001000 | 5 | 00F38 | 9247 | SUBSTART,R5 |
| 2571 | | USING | Ordinary | 00000001 | 00001348 | 00001000 | 12 | 00FF4 | 3746 | CP6,R12 |
| 3778 | | USING | Ordinary | 00000001 | 0000233E | 00001000 | 12 | 00063 | 3809 | CP0,R12 |
| 3820 | | USING | Ordinary | 00000001 | 000023A8 | 00001000 | 12 | 0004C | 3835 | CP1,R12 |
| 3850 | | USING | Ordinary | 00000001 | 000023FA | 00001000 | 12 | 0001C | 3854 | CP3,R12 |
| 3869 | | USING | Ordinary | 00000001 | 0000241C | 00001000 | 12 | 001EE | 3990 | CP4,R12 |
| 4015 | | USING | Ordinary | 00000001 | 0000260C | 00001000 | 12 | | | CP7,R12 |
| 4026 | | USING | Ordinary | 00000001 | 00002618 | 00001000 | 12 | 00020 | 4041 | CP8,R12 |
| 4049 | | USING | Ordinary | 00000001 | 00002646 | 00001000 | 12 | 000B0 | 4098 | CP16,R12 |
| 4106 | | USING | Ordinary | 00000001 | 00002702 | 00001000 | 12 | 00012 | 4108 | CP24,R12 |
| 4122 | | USING | Ordinary | 00000001 | 0000271A | 00001000 | 12 | 00010 | 4124 | CP25,R12 |
| 4138 | | USING | Ordinary | 00000001 | 0000273A | 00001000 | 12 | 000A0 | 4181 | CP36,R12 |
| 4189 | | USING | Ordinary | 00000001 | 000027E0 | 00001000 | 12 | 00370 | 4418 | CP38,R12 |
| 4441 | | USING | Ordinary | 00000001 | 00002B54 | 00001000 | 12 | 001E2 | 4561 | CP41,R12 |
| 4599 | | USING | Ordinary | 00000001 | 00002D38 | 00001000 | 12 | 002FE | 4760 | CP51,R12 |
| 4802 | | USING | Ordinary | 00000001 | 00002FC0 | 00001000 | 12 | 00076 | 4834 | CP52,R12 |
| 4857 | | USING | Ordinary | 00000001 | 00003038 | 00001000 | 12 | 00014 | 4868 | CP54,R12 |
| 4882 | | USING | Ordinary | 00000001 | 0000305A | 00001000 | 12 | 00018 | 4894 | CP56,R12 |
| 4911 | | USING | Ordinary | 00000001 | 00003084 | 00001000 | 12 | 0017C | 5023 | CP59,R12 |
| 5042 | | USING | Ordinary | 00000001 | 00003204 | 00001000 | 12 | 000A8 | 5096 | CP62,R12 |
| 5112 | | USING | Ordinary | 00000001 | 000032B8 | 00001000 | 12 | | | CP85,R12 |
| 5137 | | USING | Ordinary | 00000001 | 000032DC | 00001000 | 12 | 00012 | 5139 | CP34,R12 |
| 5184 | | USING | Ordinary | 00000001 | 0000330E | 00001000 | 12 | 0009C | 5240 | CP12,R12 |
| 5257 | | USING | Ordinary | 00000001 | 000033B0 | 00001000 | 12 | | | CP19,R12 |
| 5273 | | USING | Ordinary | 00000001 | 000033B8 | 00001000 | 12 | 0022C | 5443 | CP20,R12 |
| 5466 | | USING | Ordinary | 00000001 | 000035E8 | 00001000 | 12 | 00038 | 5468 | CP21,R12 |
| 5503 | | USING | Ordinary | 00000001 | 00003628 | 00001000 | 12 | | | CP22,R12 |
| 5519 | | USING | Ordinary | 00000001 | 00003630 | 00001000 | 12 | 00022 | 5526 | CP23,R12 |
| 5546 | | USING | Ordinary | 00000001 | 00003656 | 00001000 | 12 | | | CP33,R12 |
| 5571 | | USING | Ordinary | 00000001 | 0000365E | 00001000 | 12 | 0031A | 5763 | CP57,R12 |
| 5769 | | DROP | | | | | 12 | | | R12 |
| 5772 | | USING | Ordinary | 00000001 | 000038C6 | 00001000 | 12 | 0004A | 5791 | *,R12 |
| 5795 | | DROP | | | | | 12 | | | R12 |
| 5799 | | USING | Ordinary | 00000001 | 0000365E | 00001000 | 12 | 002E2 | 5820 | CP57,R12 |
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| 6625 | | USING | Ordinary | 00000001 | 000042F4 | 00001000 | 12 | | | CP84,R12 |
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| 6692 | | USING | Ordinary | 00000001 | 0000434A | 00001000 | 12 | 00042 | 6701 | CP83,R12 |
| 6726 | | USING | Ordinary | 00000001 | 0000438E | 00001000 | 12 | 0002E | 6733 | CP18,R12 |
| 6754 | | USING | Ordinary | 00000001 | 000043C8 | 00001000 | 12 | 00038 | 6774 | CP26,R12 |
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| 6917 | | USING | Ordinary | 00000001 | 00004586 | 00001000 | 12 | 00038 | 6925 | CP28,R12 |
| 6950 | | USING | Ordinary | 00000001 | 000045C4 | 00001000 | 12 | | | CP29,R12 |
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| 7198 | | USING | Ordinary | 00000001 | 000047A4 | 00001000 | 12 | 00008 | 7199 | CP68,R12 |
| 7217 | | USING | Ordinary | 00000001 | 000047B0 | 00001000 | 12 | | | CP70,R12 |
| 7233 | | USING | Ordinary | 00000001 | 000047B8 | 00001000 | 12 | 0000E | 7236 | CP72,R12 |
| 7257 | | USING | Ordinary | 00000001 | 000047D8 | 00001000 | 12 | 00026 | 7273 | CP73,R12 |
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| 7634 | | USING | Ordinary | 00000001 | 00004C20 | 00001000 | 12 | 003FA | 7904 | CP79,R12 |
| 7918 | | USING | Ordinary | 00000001 | 00005026 | 00001000 | 12 | 0001E | 7932 | CP80,R12 |
| 7946 | | USING | Ordinary | 00000001 | 00005054 | 00001000 | 12 | 00030 | 7962 | CP86,R12 |
| 7980 | | USING | Ordinary | 00000001 | 0000508E | 00001000 | 12 | 0020C | 8120 | CP87,R12 |
| 8143 | | USING | Ordinary | 00000001 | 000052A2 | 00001000 | 12 | 00FE2 | 9248 | CP69,R12 |

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X50    STEPNAME: IEX50    PROCSTEP: X390

Primary input:  lines      1 to    1946 of SYSD.ALGOLF.ASM(IEX50)

SYSLIB library records read: 10333

SYSUT1 work file size: 952733 bytes

SYSUT2 work file size: 271751 bytes

SYSUT3 work file size: 155680 bytes

SYSLIN file records written: 461

TXA000I Return code 0, elapsed time 7.64 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX50000 | 006286 | 2 |

# IEX51

LEVEL

V2.M01

 X390 3.1.04  2012/08/17 13.13

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX51)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131331.RA000.T1X51.OBJECT
SYSPRINT    JES2.JOB09279.SO0102
SYSUT1      SYS12230.T131331.RA000.T1X51.SYSUT1
SYSUT2      SYS12230.T131331.RA000.T1X51.SYSUT2
SYSUT3      SYS12230.T131331.RA000.T1X51.SYSUT3
```

```
Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

                                     2 *                                                                    00002001
                                     3 *       FUNCTION/OPERATION -                                         00003001
                                     4 *       THE TABLES NEEDED AT OBJECT TIME ARE PREPARED AND            00004001
                                     5 *       INCLUDED IN THE OBJECT MODULE. THEY ARE PROGRAM BLOCK        00005001
                                     6 *       TABLE, LABEL ADDRESS TABLE, AND DATASET TABLE. ESD           00006001
                                     7 *       RECORDS FOR THE REQUIRED LIBRARY ROUTINES ARE GENERATED.     00007001
                                     8 *       THE INFORMATION REQUIRED TO START THE EXECUTION,             00008001
                                     9 *       INCLUDING THE END STMT, IS GENERATED. A TABLE CONTAINING     00009001
                                    10 *       THE DSA SIZES FOR THE PROGRAM BLOCKS IS PREPARED AND         00010001
                                    11 *       TOGETHER WITH THE OBJECT MODULE SIZE OUTPUT TO               00011001
                                    12 *       SYSPRINT                                                     00012001
                                    13 *                                                                    00013001
                                    14 *       CSECT IEX60000 -                                             00014001
                                    15 *       THE ERROR PATTERNS GENERATED DURING COMPILATION PHASE        00015001
                                    16 *       ARE HANDLED AND THE CORRESPONDING DIAGNOSTIC MESSAGES        00016001
                                    17 *       ARE GENERATED                                                00017001
                                    18 *                                                                    00018001
                                    19 *       CSECT IEX51002 -                                             00019001
                                    20 *       ALL AREAS RESERVED ARE RELEASED AND THE DCBS                 00020001
                                    21 *       NOT CLOSED EARLIER ARE CLOSED, THE ORIGINAL PICA IS          00021001
                                    22 *       RESTORED, THE RETURN CODE IS FOUND. CONTROL IS               00022001
                                    23 *       RETURNED TO COMPILER DIRECTORY IEX00                         00023001
                                    24 *                                                                    00024001
                                    25 *       ENTRY POINTS -                                               00025001
                                    26 *       IEX51000 - NORMAL END OF COMPILATION                         00026001
                                    27 *                  XCTL EP=IEX51000 THE MODULE IS                    00027001
                                    28 *                  NORMALLY ENTERED FROM IEX40                       00028001
                                    29 *       IEX51ER1 - ABNORMAL END OF COMPILATION                       00029001
                                    30 *                  XCTL EP=IEX51ER1 IS USED BY IEX40                 00030001
                                    31 *                  AND IEX50                                         00031001
                                    32 *       IEX51ER2 - ABNORMAL END OF COMPILATION                       00032001
                                    33 *                  XCTL EP=IEX51ER2 IS USED BY IEX40                 00033001
                                    34 *       IEX51002 - ABNORMAL END OF COMPILATION                       00034001
                                    35 *                  XCTL EP=IEX51002 IS USED BY IEX00,                00035001
                                    36 *                  IEX21, AND IEX31                                  00036001
                                    37 *                                                                    00037001
                                    38 *       INPUT - N/A                                                  00038001
                                    39 *                                                                    00039001
                                    40 *       OUTPUT -                                                     00040001
                                    41 *       PART OF THE OBJECT MODULE IS GENERATED AND OUTPUT ON         00041001
                                    42 *       SYSLIN AND/OR SYSPUNCH                                       00042001
                                    43 *       STORAGE REQUIREMENTS AND DIAGNOSTIC MESSAGES ARE             00043001
                                    44 *       OUTPUT ON SYSPRINT                                           00044001
                                    45 *                                                                    00045001
                                    46 *       EXTERNAL ROUTINES -                                          00046001
                                    47 *       THE PRINT ROUTINE IN IEX00 IS USED                           00047001
                                    48 *                                                                    00048001
                                    49 *       EXIT - NORMAL-                                               00049001
                                    50 *       CONTROL IS GIVEN TO COMPILER DIRECTORY, IEX00, BY MEANS      00050001
                                    51 *       OF THE RETURN MACRO INSTRUCTION                              00051001
                                    52 *                                                                    00052001
                                    53 *       EXIT - ERROR -                                               00053001
                                    54 *       AFTER PROGRAM INTERRUPTS AND I/O ERRORS THE MODULE GETS      00054001
                                    55 *       CONTROL BACK AND EXITS NORMALLY                              00055001
                                    56 *                                                                    00056001
                                    57 *       TABLES/WORKAREAS -                                           00057001
                                    58 *       THE MESSAGE TEXTS WITH CORRESPONDING ADDRESS TABLE ARE       00058001
                                    59 *       IN THE LOAD MODULE IEX51M                                    00059001
                                    60 *       THE ERROR MESSAGE EDITING ROUTINE, CSECT IEX60000, ALSO      00060001
                                    61 *       USES THE FOLLOWING TABLES -                                  00061001
                                    62 *       WINTEBC  - TRANSLATION OF INTERNAL CHARACTERS TO EBCDIC      00062001
                                    63 *       WSYMBSRC - TRANSLATION OF SOURCE OPERATORS                   00063001
                                    64 *       WSYMBSTK - TRANSLATION OF INTERNAL SYMBOLS TO EBCDIC         00064001
                                    65 *       WORDSEBC - TRANSLATION OF COMPOUND SYMBOLS IF SOURCE IN      00065001
                                    66 *                  EBCDIC                                            00066001
                                    67 *       WORDSISO - TRANSLATION OF COMPOUND SYMBOLS IF SOURCE IN      00067001
                                    68 *                  ISOCODE                                           00068001
                                    69 *       WEBCDIC  - TRANSLATION EBCDIC-EBCDIC                         00069001
                                    70 *       A WORKAREA OF 270 BYTES, WAREA, IS USED FOR BUILDING         00070001
                                    71 *       THE MESSAGES                                                 00071001
                                    72 *                                                                    00072001
                                    73 *       FOR THE EXTERNAL REFERENCES TO THE LIBRARY ROUTINES ONE      00073001
                                    74 *       OF THE TABLES SHRTAB AND LNGTAB, CONTAINING THE MODULE       00074001
                                    75 *       NAMES, IS USED. THE GENERATE ROUTINE USES THREE TABLES,      00075001
                                    76 *       ESDT, TXTT, AND RLDT, FOR GENERATION OF THE DIFFERENT        00076001
                                    77 *       TYPES OF OBJECT RECORDS.                                     00077001
                                    78 *                                                                    00078001
                                    79 *       THE PART OF COMMON WORKAREA STARTING AT SYSUT1 IS            00079001
                                    80 *       INITIALIZED BY THE LOAD MODULE IEX40 AND IS USED BY THIS     00080001
                                    81 *       AND THE PRECEDING LOAD MODULE                                00081001
                                    82 *                                                                    00082001
                                    83 *       ATTRIBUTES - NONE                                            00083001
                                    84 *                                                                    00084001
                                    85 *       NOTES -                                                      00085001
                                    86 *       CHARACTER CODE DEPENDENCE -                                  00086001
                                    87 *                                                                    00087001
                                    88 *       CSECT IEX51000 -                                             00088001
                                    89 *       THE OPERATION OF THE ROUTINES GENERATE AND PRINT             00089001
                                    90 *       STORAGE REQUIREMENTS DEPENDS UPON AN INTERNAL                00090001
                                    91 *       REPRESENTATION OF THE EXTERNAL CHARACTER SET WHICH IS        00091001
                                    92 *       EQUIVALENT TO THE ONE USED AT ASSEMBLY TIME.                 00092001
                                    93 *                                                                    00093001
                                    94 *       CSECT IEX60000 -                                             00094001
                                    95 *       FOR THE BUILDING OF A MESSAGE (CODE PART BETWEEN COT03       00095001
                                    96 *       AND COT12) THE FOLLOWING APPLIES -                           00096001
                                    97 *       IN CASE NO SOURCE INFORMATION IS TO BE INSERTED              00097001
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     98 *       (COT31), OR IF THE INFORMATION IS EBCDIC-CHARACTERS              00098001
                                     99 *       (COT07), THE OPERATION OF CSECT IEX60000 DEPENDS UPON AN         00099001
                                    100 *       INTERNAL REPRESENTATION OF THE EXTERNAL CHARACTER SET            00100001
                                    101 *       WHICH IS EQUIVALENT TO THE ONE USED AT ASSEMBLY TIME.            00101001
                                    102 *       IF THE SOURCE INFORMATION TO BE INSERTED IS INTERNAL             00102001
                                    103 *       CHARACTERS (COT33) THE OPERATION OF CSECT IEX60000               00103001
                                    104 *       DEPENDS UPON A TRANSLATION FROM THE INTERNAL                     00104001
                                    105 *       REPRESENTATION TO THE EBCDIC CHARACTER SET BY MEANS OF           00105001
                                    106 *       THE TABLE 'WINTEBC'.                                             00106001
                                    107 *       IF THE SOURCE INFORMATION TO BE INSERTED IS INTERNAL             00107001
                                    108 *       ALGOL SYMBOLS (COT10) THE OPERATION OF CSECT IEX60000            00108001
                                    109 *       DEPENDS UPON A TRANSLATION FROM THE INTERNAL                     00109001
                                    110 *       REPRESENTATION TO THE EBCDIC CHARACTER SET BY MEANS OF           00110001
                                    111 *       THE TABLES 'WSYMBSTK'/'WSYMBSRC' AND 'WORDSISO'/                 00111001
                                    112 *       'WORDSEBC'.                                                      00112001
                                    113 *                                                                        00113001
                                    114 *       FOR THE OUTPUT OF A MESSAGE (CODE PART BETWEEN COT12             00114001
                                    115 *       AND COT21) THE FOLLOWING APPLIES -                               00115001
                                    116 *       WHEN A MESSAGE HAS BEEN BUILT IN EBCDIC, AN EBCDIC-              00116001
                                    117 *       EBCDIC TRANSLATION IS PERFORMED BEFORE OUTPUT BY MEANS           00117001
                                    118 *       OF THE TABLE 'WEBCDIC'. THUS THE OUTPUT MAY BE MODIFIED          00118001
                                    119 *       BY MAKING CHANGES IN THIS TABLE.                                 00119001
                                    120 *                                                                        00120001
                                    121 *       THE OPERATION OF THE OTHER PARTS DOES NOT DEPEND UPON A          00121001
                                    122 *       PARTICULAR INTERNAL REPRESENTATION OF THE EXTERNAL               00122001
                                    123 *       CHARACTER SET.                                                   00123001
                                    124 *                                                                        00124001
                                    125 *       THIS MODULE WILL BE LINKED TOGETHER WITH THE MODULE              00125001
                                    126 *       IEX51M TO FORM THE MODULE IEX51                                  00126001
                                    127 *                                                                        00127001
                                    128 *       THIS MODULE IS ONLY INTENDED TO BE EXECUTED IN                   00128001
                                    129 *       CONNECTION WITH THE OTHER MODULES OF THE ALGOL COMPILER          00129001
                                    130 *       IN PARTICULAR IT REQUIRES THE COMMON WORKAREA                    00130001
                                    131 *                                                                        00131001
000000                00000 00A0E   132 IEX51000 CSECT                                                       00132001
                                    133 *                                                                        00133001
                                    134 *       DEFINITIONS                                                      00134001
                                    135 *                                                                        00135001
                      00800         136 RASLGT   EQU   2048                LENGTH OF RETURN ADDR STACK      00136001
                      0001C         137 LPGCF    EQU   28                  LENGTH OF PUT/GET CONTROL FIELD  00137001
                                    138 *                                                                        00138001
                                    139 *       ENTRY POINTS                                                     00139001
                                    140 *                                                                        00140001
                                    141          ENTRY IEX51ER1                                                  00141001
                                    142          ENTRY IEX51ER2                                                  00142001
                                    143 *                                                                        00143001
                                    144          IEXENTRY 'IEX51000 LEVEL 2.1 &SYSDATE &SYSTIME'                 00144001
                                    145+*                                                                        01-IEXEN
000000 47F0 F026            00026   146+         B     38(,R15)          BRANCH AROUND ID                     01-IEXEN
000004 21                           147+         DC    AL1(33)           LENGTH OF IDENTIFIER                 01-IEXEN
000005 C9C5E7F5F1F0F0F0             148+         DC    CL33'IEX51000 LEVEL 2.1 08/17/12 13.13'               +01-IEXEN
                                       +                                                 IDENTIFIER      01-IEXEN
                                    149 *                                                                        00145001
                 R:A  00000         150          USING IEX51000,R10                                              00146001
                 R:D  00000         151          USING WORKAREA,R13                                              00147001
                                    152 *                                                                        00148001
000026 18AF                         153          LR    R10,R15                                                   00149001
000028 1B88                         154          SR    R8,R8                                                     00150001
                                    155 *                                                                        00151001
                                    156 *       TEST MODE                                                        00152001
                                    157 *                                                                        00153001
00002A 4120 A564            00564   158 TRM1     LA    R2,IEX51ER1         GIVE DIRECTORY                   00154001
00002E 5020 D090            00090   159          ST    R2,ERET             RETURN ADDR                      00155001
000032 9608 D082      00082         160          OI    COMPFLGS+2,NOSC     INDICATE NO SC AVAILABLE         00156001
000036 9180 D080      00080         161          TM    COMPFLGS,COMPMODE   SYNTAX CHECK MODE ?              00157001
00003A 4710 A1CA            001CA   162          BO    TRM10               YES, BYPASS ALL CODE GENERATION  00158001
00003E 9160 D081      00081         163          TM    COMPFLGS+1,NLOAD+NDECK NOLOAD AND NODECK SPECIFIED ?  00159001
000042 4710 A1CA            001CA   164          BO    TRM10               YES, NO CODE GENERATION          00160001
                                    165 *                                                                        00161001
                                    166 *       GENERATE LAT, TXT RECORDS                                        00162001
                                    167 *                                                                        00163001
000046 5060 A608            00608   168 TRM8     ST    R6,PRPTAR           SET                              00164001
00004A 9102 A60B      0060B         169          TM    PRPTAR+3,X'02'      PRPOINTER                        00165001
00004E 4780 A05C            0005C   170          BZ    TRM4                TO                               00166001
000052 4120 DA50            00A50   171          LA    R2,ZEROHW           FULL WORD BOUNDARY               00167001
000056 45E0 A866            00866   172          BAL   R14,GENTXTS                                               00168001
00005A 0002                         173          DC    H'2'                GENERATE 2 BYTES                 00169001
                                    174 *                                                                        00170001
00005C 5060 A698            00698   175 TRM4     ST    R6,ALAT             SAVE PRPOINTER AT LAT-BEGIN      00171001
000060 5820 D61C            0061C   176          L     R2,LATAB            GET ADDR OF LAT                  00172001
000064 4830 D0A2            000A2   177          LH    R3,LN               GET DISPLACEMENT OF LAST LABEL   00173001
000068 4130 3004            00004   178          LA    R3,4(,R3)           LENGTH OF LAT                    00174001
00006C 4030 A074            00074   179          STH   R3,TRM39            STORE LENGTH IN TRM39            00175001
000070 45E0 A866            00866   180          BAL   R14,GENTXTS         GENERATE TXT RECORDS             00176001
000074 0000                         181 TRM39    DC    H'0'                LENGTH OF LAT                    00177001
                                    182 *                                                                        00178001
                                    183 *       RLD RECORDS FOR LAT                                              00179001
                                    184 *                                                                        00180001
000076 4830 A074            00074   185 TRM40    LH    R3,TRM39            GET LENGTH OF LAT                00181001
00007A 4140 0070            00070   186          LA    R4,LATBEG+4         GET LENGTH OF 1ST PART           00182001
00007E 1B34                         187          SR    R3,R4               GET LENGTH OF LAST PART          00183001
000080 47D0 A09A            0009A   188          BNP   TRM42               ¬> ZERO, BRANCH                  00184001
000084 4030 A094            00094   189          STH   R3,TRM41            STORE LENGTH OF LAST PART        00185001
000088 5820 A698            00698   190          L     R2,ALAT             GET PRPOINTER AT LAT BEGIN       00186001
00008C 4120 2070            00070   191          LA    R2,LATBEG+4(,R2)    PRPOINTER AT LAST PART           00187001
000090 45E0 A876            00876   192          BAL   R14,GENRLD          GENERATE RLD RECORD              00188001
```

```
  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000094 0000                         193 TRM41    DC    H'0'                   LENGTH OF LAST PART              00189001
000096 0001                         194          DC    H'1'                                                    00190001
000098 0001                         195          DC    H'1'                                                    00191001
                                    196 *                                                                      00192001
                                    197 *        ESD RECORDS FOR LAT                                           00193001
                                    198 *                                                                      00194001
00009A 5850 D61C            0061C   199 TRM42    L     R5,LATAB               GET ADDR OF LAT                  00195001
00009E 4170 001C            0001C   200          LA    R7,LATNR               GET NO OF ENTRIES FOR ST FUNCTS  00196001
0000A2 4190 A74C            0074C   201          LA    R9,SHRTAB              ADDR TABLE FOR SHORT PREC        00197001
0000A6 9102 D080      00080         202          TM    COMPFLGS,LNG           LONG PRECISION  ?                00198001
0000AA 4780 A0B2            000B2   203          BZ    TRM44                  NO, BRANCH                       00199001
0000AE 4190 A7D3            007D3   204          LA    R9,LNGTAB              LONG, CHANGE ADDR                00200001
0000B2 9500 5000      00000         205 TRM44    CLI   0(R5),0                ROUTINE USED ?                   00201001
0000B6 4770 A0CE            000CE   206          BNE   TRM45                  NO                               00202001
0000BA D204 A0C7 9000 000C7 00000   207          MVC   TRM43+3(5),0(R9)       YES, MOVE NAME TO ESD CALL       00203001
0000C0 4520 A85A            0085A   208          BAL   R2,GENESD              GENERATE ESD RECORD              00204001
0000C4 C9C8C94040404040             209 TRM43    DC    CL8'IHI      '                                          00205001
0000CC 02                           210          DC    X'02'                                                   00206001
                                    211 *                                                                      00207001
0000CD 00
0000CE 4150 5004            00004   212 TRM45    LA    R5,4(,R5)              STEP                             00208001
0000D2 4190 9005            00005   213          LA    R9,5(,R9)              ADDRS                            00209001
0000D6 4670 A0B2            000B2   214          BCT   R7,TRM44               HANDLE NEXT ENTRY IF ANY         00210001
                                    215 *                                                                      00211001
                                    216 *        RLD RECORDS FOR ESD ENTRIES IN LAT                            00212001
                                    217 *                                                                      00213001
0000DA 58B0 A698            00698   218 TRM46    L     R11,ALAT               GET PRPOINTER AT LAT BEGIN       00214001
0000DE 5850 D61C            0061C   219          L     R5,LATAB               GET ADDR OF LAT                  00215001
0000E2 4170 001C            0001C   220          LA    R7,LATNR               GET NO OF ENTRIES FOR ST FUNCS   00216001
0000E6 4190 0001            00001   221          LA    R9,1                   INIT REG FOR R ESID FOR RLDCALL  00217001
                                    222 *                                                                      00218001
0000EA 9500 5000      00000         223 TRM49    CLI   0(R5),0                ROUTINE USED ?                   00219001
0000EE 4770 A106            00106   224          BNE   TRM48                  NO                               00220001
0000F2 4190 9001            00001   225          LA    R9,1(,R9)              YES, GET ESID FOR R              00221001
0000F6 4090 A102            00102   226          STH   R9,TRM47               GIVE TO RLD-CALL                 00222001
0000FA 182B                         227          LR    R2,R11                                                  00223001
0000FC 45E0 A876            00876   228          BAL   R14,GENRLD             GENERATE RLD RECORD              00224001
000100 0004                         229          DC    H'4'                   LENGTH OF ADDR TABLE             00225001
000102 0000                         230 TRM47    DC    H'0'                   ESID OF RELOC FACTOR R           00226001
000104 0001                         231          DC    H'1'                   ESID OF POSITION IDENTIFIER P    00227001
                                    232 *                                                                      00228001
000106 41B0 B004            00004   233 TRM48    LA    R11,4(,R11)            STEP                             00229001
00010A 4150 5004            00004   234          LA    R5,4(,R5)              ADDRS                            00230001
00010E 4670 A0EA            000EA   235          BCT   R7,TRM49               HANDLE NEXT ENTRY IF ANY         00231001
                                    236 *                                                                      00232001
                                    237 *        GENERATE PBTAB, 4TH VERSION, TXT RECORDS                      00233001
                                    238 *                                                                      00234001
000112 5060 A694            00694   239 TRM2     ST    R6,APBT                STORE PRPOINTER                  00235001
000116 4130 D634            00634   240          LA    R3,PBTAB3+4            GET START                        00236001
00011A 5840 D61C            0061C   241          L     R4,APBTAB4             ADDRS                            00237001
00011E 5080 4000            00000   242          ST    R8,0(,R4)              SET ZEROES                       00238001
000122 4820 D09E            0009E   243          LH    R2,PBN                 GET NUMBER OF PROGRAM BLOCKS     00239001
000126 4140 4004            00004   244          LA    R4,4(,R4)              STEP ADDR                        00240001
00012A D203 4000 D0B0 00000 000B0   245          MVC   0(4,R4),PIDENT         INSERT PROGRAM IDENTIFICATION    00241001
000130 5080 4004            00004   246 TRM5     ST    R8,4(,R4)              INSERT ZEROES                    00242001
000134 4140 4008            00008   247          LA    R4,8(,R4)              STEP ADDR                        00243001
000138 58B0 3000            00000   248          L     R11,0(,R3)             TAKE PBTAB3 ENTRY                00244001
00013C 4850 DA56            00A56   249          LH    R5,ONEENTRY            ADD                              00245001
000140 8950 0010            00010   250          SLL   R5,16                  SIZE OF                          00246001
000144 1AB5                         251          AR    R11,R5                 ONE ENTRY                        00247001
000146 50B0 4000            00000   252          ST    R11,0(,R4)             IN DSA                           00248001
00014A 4130 3004            00004   253          LA    R3,4(,R3)              STEP ADDR                        00249001
00014E 4620 A130            00130   254          BCT   R2,TRM5                MOVE NEXT IF ANY                 00250001
000152 4140 4004            00004   255          LA    R4,4(,R4)                                               00251001
000156 4820 D0A0            000A0   256          LH    R2,KBN                 GET NUMBER                       00252001
00015A 1222                         257          LTR   R2,R2                  OF LAST CONST BLOCK              00253001
00015C 4780 A17C            0017C   258          BZ    TRM7                   NO MORE BLOCK THAN NR ZERO       00254001
000160 4B20 D09E            0009E   259          SH    R2,PBN                 GET NO OF CONST BLKS EXCEPT 0    00255001
000164 4830 A61A            0061A   260          LH    R3,KH4096              GET LENGTH OF CONST BLOCK        00256001
000168 1853                         261          LR    R5,R3                                                   00257001
00016A 5080 4004            00004   262          ST    R8,4(,R4)              INSERT ZEROES                    00258001
00016E 5030 4000            00000   263 TRM6     ST    R3,0(,R4)              STORE DISP OF CONST BLOCK        00259001
000172 4140 4008            00008   264          LA    R4,8(,R4)              STEP ADDR                        00260001
000176 1A35                         265          AR    R3,R5                  INCREASE DISPLACEMENT            00261001
000178 4620 A16E            0016E   266          BCT   R2,TRM6                STORE NEXT IF ANY                00262001
                                    267 *                                                                      00263001
00017C 5820 D61C            0061C   268 TRM7     L     R2,APBTAB4             GET ADDR OF PBTAB4               00264001
000180 1854                         269          LR    R5,R4                  COMPUTE                          00265001
000182 1B52                         270          SR    R5,R2                  LENGTH OF                        00266001
000184 4050 A18C            0018C   271          STH   R5,TRM7AA              PBTAB4                           00267001
000188 45E0 A866            00866   272          BAL   R14,GENTXTS            GENERATE TXT RECORDS             00268001
00018C 0000                         273 TRM7AA   DC    H'0'                   LENGTH OF PBTAB4                 00269001
                                    274 *                                                                      00270001
                                    275 *        RLD RECODS FOR PBTAB4                                         00271001
                                    276 *                                                                      00272001
00018E 5870 A694            00694   277 TRM52    L     R7,APBT                GET PRPOINTER AT PBTAB4 BEGIN    00273001
000192 47F0 A1B2            001B2   278          B     TRM53                  GENERATE RLD RECORD              00274001
                                    279 *                                                                      00275001
000196 940F A1BF      001BF         280 TRM70    NI    TRM71+1,X'0F'          CHANGE BRANCH CONDITION          00276001
00019A 4850 D0A0            000A0   281          LH    R5,KBN                 GET NUMBER OF LAST CONST BLOCK   00277001
00019E 1985                         282          CR    R8,R5                  ZERO ?                           00278001
0001A0 4780 A1CA            001CA   283          BE    TRM10                  YES                              00279001
0001A4 4820 D09E            0009E   284          LH    R2,PBN                 NO, GET NUMBER OF                00280001
0001A8 1B52                         285          SR    R5,R2                  CONST BLKS EXC 0                 00281001
0001AA 8920 0003            00003   286          SLL   R2,3                   GET PRPOINTER                    00282001
0001AE 4172 7008            00008   287          LA    R7,8(R2,R7)            AT SECOND CONST BLK              00283001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

0001B2 1827                          288 TRM53    LR    R2,R7                                               00284001
0001B4 45E0 A876              00876  289          BAL   R14,GENRLD                                          00285001
0001B8 0004                          290          DC    H'4'                                                00286001
0001BA 0001                          291          DC    H'1'                                                00287001
0001BC 0001                          292          DC    H'1'                                                00288001
                                     293 *                                                                  00289001
0001BE 47F0 A196              00196  294 TRM71    B     TRM70               BRANCH AFTER FIRST RECORD       00290001
0001C2 4170 7008              00008  295          LA    R7,8(,R7)           STEP ADDR                       00291001
0001C6 4650 A1B2              001B2  296          BCT   R5,TRM53            HANDLE NEXT ENTRY IF ANY        00292001
                                     297 *                                                                  00293001
                                     298 *        CONSTRUCT DATASET TABLE                                   00294001
                                     299 *                                                                  00295001
0001CA 4120 DAA8              00AA8  300 TRM10    LA    R2,DSTAB            GET ADDR OF DSTAB               00296001
0001CE 5060 A60C              0060C  301          ST    R6,DSTABPRP         STORE PRPOINTER                 00297001
0001D2 4170 DA30              00A30  302          LA    R7,IOTAB            GET ADDR OF IOTAB               00298001
0001D6 4150 000F              0000F  303          LA    R5,15               LOAD MAX DS NUMBER              00299001
0001DA 91FF 7010        00010        304          TM    16(R7),X'FF'        UNDET DS NO OCCURRED ?          00300001
0001DE 4770 A204              00204  305          BNZ   TRM12A              YES, MDSN=15                    00301001
0001E2 4130 000F              0000F  306          LA    R3,15               DETERMINE                       00302001
0001E6 41B0 0001              00001  307          LA    R11,1                                               00303001
0001EA 4143 7000              00000  308 TRM11    LA    R4,0(R3,R7)                                         00304001
0001EE 9500 4000        00000        309          CLI   0(R4),0                                             00305001
0001F2 4770 A1FE              001FE  310          BNE   TRM11A              MAX                             00306001
0001F6 0630                          311          BCTR  R3,0                DS                              00307001
0001F8 193B                          312          CR    R3,R11                                              00308001
0001FA 4770 A1EA              001EA  313          BNE   TRM11                                               00309001
0001FE 1853                          314 TRM11A   LR    R5,R3               NUMBER USED                     00310001
000200 4030 A618              00618  315          STH   R3,MDSN             USED                            00311001
000204 0650                          316 TRM12A   BCTR  R5,0                GET MAX DS NUMBER MINUS ONE     00312001
000206 4130 0024              00024  317 TRM12    LA    R3,36               CALC                            00313001
00020A 4C30 A618              00618  318          MH    R3,MDSN             LGT OF DSTAB                    00314001
00020E 4130 3028              00028  319          LA    R3,40(,R3)          WITHOUT PGCF                    00315001
000212 4030 A640              00640  320          STH   R3,DSTABLGT                                         00316001
000216 4133 6000              00000  321          LA    R3,0(R3,R6)         STORE                           00317001
00021A 5030 2000              00000  322          ST    R3,0(,R2)           PGCF-POINTER                    00318001
00021E 1BBB                          323          SR    R11,R11             LOAD DS NO FOR ERROR PATTERN    00319001
000220 9170 7000        00000        324          TM    0(R7),X'70'         CORRECT SPEC FOR SYSIN          00320001
000224 41E0 A24C              0024C  325          LA    R14,TRM19           GET RETURN ADDR FOR ERROR RTN   00321001
000228 4770 A590              00590  326          BNZ   ERR188              NO, GENERATE ERROR PATTERN      00322001
00022C D223 2004 A61C 00004 0061C    327          MVC   4(DSTABLEL,R2),DSTABLE YES, INSERT STANDARD DSTABLE 00323001
000232 41B0 0001              00001  328          LA    R11,1               LOAD DS NR FOR ERROR PATTERN    00324001
000236 91A0 7001        00001        329          TM    1(R7),X'A0'         CORRECT SPEC FOR SYSPRINT       00325001
00023A 4770 A590              00590  330          BNZ   ERR188              NO, GENERATE ERROR PATTERN      00326001
00023E D223 2028 A61C 00028 0061C    331          MVC   40(DSTABLEL,R2),DSTABLE YES, INSERT STANDARD DSTABLE 00327001
000244 9202 2042        00042        332          MVI   66(R2),X'02'        CHANGE DS FIELD                 00328001
000248 9202 204A        0004A        333          MVI   74(R2),X'02'                                        00329001
00024C 1835                          334 TRM19    LR    R3,R5               GET MAX DS NUMBER MINUS ONE     00330001
00024E 1233                          335          LTR   R3,R3               ZERO ?                          00331001
000250 4780 A330              00330  336          BZ    TRM22               YES, BYPASS MANIP ON BYTES 2-15 00332001
000254 94EF 7010        00010        337          NI    16(R7),X'EF'        RESET SYSACT8 BIT               00333001
000258 9101 7010        00010        338          TM    16(R7),X'01'        PRE COMP PROCEDURE ?            00334001
00025C 4780 A27E              0027E  339          BZ    TRM192              NO                              00335001
000260 4140 204C              0004C  340          LA    R4,76(,R2)          GET ADDR OF DS2 IN DSTAB        00336001
000264 D223 4000 A61C 00000 0061C    341 TRM191   MVC   0(DSTABLEL,R4),DSTABLE MOVE STANDARD DSTABLE        00337001
00026A 9242 401A        0001A        342          MVI   26(R4),X'42'        CHANGE DS FIELD                 00338001
00026E 9242 4022        00022        343          MVI   34(R4),X'42'                                        00339001
000272 4140 4024              00024  344          LA    R4,DSTABLEL(,R4)    NEXT DS NUMBER IN DSTAB         00340001
000276 4630 A264              00264  345          BCT   R3,TRM191                                           00341001
00027A 47F0 A330              00330  346          B     TRM22                                               00342001
                                     347 *                                                                  00343001
00027E 91FF 7010        00010        348 TRM192   TM    16(R7),X'FF'        BYTE 16 ZERO ?                  00344001
000282 4780 A29C              0029C  349          BZ    TRM15               YES                             00345001
000286 4143 7001              00001  350 TRM14    LA    R4,1(R3,R7)         NO, OR                          00346001
00028A 9110 4000        00000        351          TM    0(R4),X'10'                   BYTE 16               00347001
00028E 4710 A298              00298  352          BO    TRM14A                                  INTO BYTES NOT  00348001
000292 D600 4000 7010 00000 00010    353          OC    0(1,R4),16(R7)      CONTAINING                      00349001
000298 4630 A286              00286  354 TRM14A   BCT   R3,TRM14                       SYSACT8 INDICATION 00350001
00029C 1835                          355 TRM15    LR    R3,R5               GET MAX DS NUMBER MINUS ONE     00351001
00029E 4143 7001              00001  356 TRM16    LA    R4,1(R3,R7)         INDICATE                        00352001
0002A2 91C0 4000        00000        357          TM    0(R4),X'C0'                   SYSACT4/13            00353001
0002A6 47E0 A2AE              002AE  358          BNO   TRM16A                                   IN BYTES   00354001
0002AA 9620 4000        00000        359          OI    0(R4),X'20'         WITH INPUT AND OUTPUT INDIC     00355001
0002AE 4630 A29E              0029E  360 TRM16A   BCT   R3,TRM16                                            00356001
0002B2 1835                          361          LR    R3,R5               GET MAX DS NR MINUS ONE         00357001
0002B4 4143 7001              00001  362 TRM17    LA    R4,1(R3,R7)                                         00358001
0002B8 41B0 3001              00001  363          LA    R11,1(,R3)          LOAD DS NUMBER FOR ERROR PATTERN 00359001
0002BC 9110 4000        00000        364          TM    0(R4),X'10'         SYSACT8 INDICATED ?             00360001
0002C0 4780 A2D8              002D8  365          BZ    TRM18               NO                              00361001
0002C4 91A0 4000        00000        366          TM    0(R4),X'A0'         YES, INPUT OR SYSACT4/13 IND ?  00362001
0002C8 4780 A2D4              002D4  367          BZ    TRM17A              NO                              00363001
0002CC 41E0 A2D8              002D8  368          LA    R14,TRM18           YES, GENERATE ERROR PATTERN     00364001
0002D0 47F0 A590              00590  369          B     ERR188                                              00365001
                                     370 *                                                                  00366001
0002D4 94F7 4000        00000        371 TRM17A   NI    0(R4),X'F7'         RESET UNDET SYSACT BIT          00367001
0002D8 4630 A2B4              002B4  372 TRM18    BCT   R3,TRM17            EXAMINE NEXT BYTE IF ANY        00368001
0002DC 1835                          373          LR    R3,R5               GET MAX DS NR MINUS ONE         00369001
0002DE 4140 204C              0004C  374          LA    R4,76(,R2)          GET ADDR OF DS2 IN DSTAB        00370001
0002E2 4110 7002              00002  375          LA    R1,2(,R7)           GET ADDR OF 2ND BYTE IN IOTAB   00371001
0002E6 D223 4000 A61C 00000 0061C    376 TRM20    MVC   0(DSTABLEL,R4),DSTABLE MOVE STANDARD MASK           00372001
0002EC 9128 1000        00000        377          TM    0(R1),X'28'         SYSACT4/13 OR UND SA IND ?      00373001
0002F0 4770 A308              00308  378          BNZ   TRM21               YES                             00374001
0002F4 9140 1000        00000        379          TM    0(R1),X'40'         NO, OUTPUT INDICATED ?          00375001
0002F8 4780 A324              00324  380          BZ    TRM211                                              00376001
0002FC 9202 401A        0001A        381          MVI   26(R4),X'02'        YES, CHANGE DS FIELD            00377001
000300 9202 4022        00022        382          MVI   34(R4),X'02'                                        00378001
000304 47F0 A324              00324  383          B     TRM211                                              00379001
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  Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

                                     384 *                                                                       00380001
000308 9140 1000        00000        385 TRM21     TM    0(R1),X'40'           OUTPUT INDICATED ?               00381001
00030C 4710 A31C              0031C  386           BO    TRM21A                YES                              00382001
000310 9240 401A        0001A        387           MVI   26(R4),X'40'          NO, CHANGE DS FIELD              00383001
000314 9240 4022        00022        388           MVI   34(R4),X'40'                                           00384001
000318 47F0 A324              00324  389           B     TRM211                                                 00385001
                                     390 *                                                                       00386001
00031C 9242 401A        0001A        391 TRM21A    MVI   26(R4),X'42'          CHANGE DS FIELD                  00387001
000320 9242 4022        00022        392           MVI   34(R4),X'42'                                           00388001
000324 4140 4024              00024  393 TRM211    LA    R4,36(,R4)            NEXT DS NUMBER IN DSTAB          00389001
000328 4110 1001              00001  394           LA    R1,1(,R1)             NEXT BYTE IN IOTAB               00390001
00032C 4630 A2E6              002E6  395           BCT   R3,TRM20                                               00391001
000330 91FF 7011        00011        396 TRM22     TM    17(R7),X'FF'          BYTE 17 ZERO ?                   00392001
000334 4780 A356              00356  397           BZ    TRM27                 YES                              00393001
000338 4830 A640              00640  398           LH    R3,DSTABLGT           NO, GET ADDR OF PGCFIELD         00394001
00033C 4133 2000              00000  399           LA    R3,0(R3,R2)                                            00395001
000340 9200 3000        00000        400           MVI   0(R3),0               INSERT ZEROES IN PGCF            00396001
000344 D21A 3001 3000 00001 00000    401           MVC   1(27,R3),0(R3)                                         00397001
00034A 4140 0800              00800  402           LA    R4,2048               INITIATE BE-FIELD                00398001
00034E 5040 3010              00010  403           ST    R4,16(,R3)                                             00399001
000352 47F0 A35A              0035A  404           B     TRM23                                                  00400001
                                     405 *                                                                       00401001
000356 9280 2000        00000        406 TRM27     MVI   0(R2),X'80'           INDICATE NO PUT/GET              00402001
                                     407 *                                                                       00403001
                                     408 *         GENERATE DSTABLE, TXT RECORDS                                 00404001
                                     409 *                                                                       00405001
00035A 9180 D080        00080        410 TRM23     TM    COMPFLGS,COMPMODE     SYNTAX CHECK MODE ?              00406001
00035E 4710 A564              00564  411           BO    TRM37                 YES, BYPASS CODE GENERATION      00407001
000362 9160 D081        00081        412           TM    COMPFLGS+1,NLOAD+NDECK NOLOAD AND NODECK SPECIFIED ?   00408001
000366 4710 A564              00564  413           BO    TRM37                 YES, NO CODE GENERATION          00409001
00036A 9104 D080        00080        414           TM    COMPFLGS,PROC         PROCEDURE COMPILATION ?          00410001
00036E 4710 A39A              0039A  415           BO    TRM24                 YES                              00411001
000372 4830 A640              00640  416           LH    R3,DSTABLGT           GET LEN OF DSTAB WITHOUT PGCF    00412001
000376 9580 2000        00000        417           CLI   0(R2),X'80'           THERE A PGCF ?                   00413001
00037A 4780 A382              00382  418           BE    TRM23A                NO                               00414001
00037E 4130 301C              0001C  419           LA    R3,LPGCF(,R3)         YES, ADD PGCF LENGTH             00415001
000382 4030 A38A              0038A  420 TRM23A    STH   R3,TRM23B             STORE LENGTH IN CALLING SEQ      00416001
000386 45E0 A866              00866  421           BAL   R14,GENTXTS           GENERATE TXT RECORDS             00417001
00038A 0000                          422 TRM23B    DC    H'0'                  LENGTH OF DSTAB                  00418001
                                     423 *                                                                       00419001
                                     424 *         RLD RECORD FOR PGCF ADDR IN DSTAB                             00420001
                                     425 *                                                                       00421001
00038C 5820 A60C              0060C  426 TRM32     L     R2,DSTABPRP           GET PRPOINTER AT DSTAB BEGIN     00422001
000390 45E0 A876              00876  427           BAL   R14,GENRLD            GENERATE RLD RECORD              00423001
000394 0004                          428           DC    H'4'                  LENGTH OF ADDR                   00424001
000396 0001                          429 TRM32ID   DC    H'1'                  ESD ID                           00425001
000398 0001                          430           DC    H'1'                                                   00426001
                                     431 *                                                                       00427001
                                     432 *         GENERATE TXT RECORDS ADDR TABLE                               00428001
                                     433 *                                                                       00429001
00039A D202 A69D D0A5 0069D 000A5    434 TRM24     MVC   ASTART(3),PRPT+1      GET PRPOINTER AT FIRST INSTR     00430001
0003A0 9102 D080        00080        435           TM    COMPFLGS,LNG          LONG PRECISION ?                 00431001
0003A4 4780 A3AC              003AC  436           BZ    TRM24A                NO, SHORT, BRANCH                00432001
0003A8 9200 A69C        0069C        437           MVI   SW,0                  LONG, CHANGE MASK                00433001
0003AC 5060 A614              00614  438 TRM24A    ST    R6,ADRPRP             STORE PRPOINTER AT ADR TABLE     00434001
0003B0 4120 A694              00694  439           LA    R2,APBT               GET ADDR OF TEXT                 00435001
0003B4 45E0 A866              00866  440           BAL   R14,GENTXTS                                            00436001
0003B8 000C                          441           DC    H'12'                 LENGTH OF TEXT                   00437001
                                     442 *                                                                       00438001
                                     443 *         ESD RECORD FOR FSA ADDR                                       00439001
                                     444 *                                                                       00440001
0003BA 9104 D080        00080        445 TRM28     TM    COMPFLGS,PROC         PROCEDURE COMPILATION ?          00441001
0003BE 4710 A3D0              003D0  446           BO    TRM54                 YES                              00442001
0003C2 4520 A85A              0085A  447           BAL   R2,GENESD             GENERATE ESD RECORD              00443001
0003C6 C9C8C9C6E2C1C9D5              448 TRM29     DC    C'IHIFSAIN'                                            00444001
0003CE 0200                          449           DC    X'0200'                                                00445001
                                     450 *                                                                       00446001
                                     451 *         RLD RECORDS FOR ADDR TABLE                                    00447001
                                     452 *                                                                       00448001
0003D0 5820 A614              00614  453 TRM54     L     R2,ADRPRP             GET PRPOINTER AT ADDR TABLE      00449001
0003D4 45E0 A876              00876  454           BAL   R14,GENRLD            GENERATE RLD RECORDS             00450001
0003D8 000C                          455           DC    H'12'                                                  00451001
0003DA 0001                          456           DC    H'1'                                                   00452001
0003DC 0001                          457           DC    H'1'                                                   00453001
                                     458 *                                                                       00454001
                                     459 *         ESD RECORD, LD ENTRY, FOR ENTRY INFO                          00455001
                                     460 *                                                                       00456001
0003DE 9104 D080        00080        461 TRM25     TM    COMPFLGS,PROC         PROCEDURE COMPILATION ?          00457001
0003E2 4710 A41A              0041A  462           BO    TRM35                 YES, BYPASS NEXT TWO RECORDS     00458001
0003E6 D202 A3F9 A615 003F9 00615    463           MVC   TRM26(3),ADRPRP+1     MOVE PRPOINTER TO CALL           00459001
0003EC 4520 A85A              0085A  464           BAL   R2,GENESD                                              00460001
0003F0 C9C8C9C5D5E3C9C6              465           DC    CL8'IHIENTIF'         NAME                             00461001
0003F8 01                            466           DC    X'01'                                                  00462001
0003F9 000000                        467 TRM26     DC    X'000000'             PRPOINTER                        00463001
0003FC 40                            468           DC    C' '                                                   00464001
0003FD 000001                        469           DC    X'000001'                                              00465001
                                     470 *                                                                       00466001
                                     471 *         ESD RECORD, LD ENTRY, FOR DSTAB                               00467001
                                     472 *                                                                       00468001
000400 D202 A413 A60D 00413 0060D    473 TRM56     MVC   TRM57(3),DSTABPRP+1   MOVE PRPOINTER TO CALL           00469001
000406 4520 A85A              0085A  474           BAL   R2,GENESD                                              00470001
00040A C9C8C9C4E2E3C1C2              475           DC    CL8'IHIDSTAB'         NAME                             00471001
000412 01                            476           DC    X'01'                                                  00472001
000413 000000                        477 TRM57     DC    X'000000'             PRPOINTER                        00473001
000416 40                            478           DC    C' '                                                   00474001
000417 000001                        479           DC    X'000001'                                              00475001
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  Active USINGs: WORKAREA,R13  IEX51000,R10

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    480 *                                                                    00476001
                                    481 *        GENERATE END RECORD                                         00477001
                                    482 *                                                                    00478001
                                    483 TRM35    TIME                                                        00479001
                                    484+* /* MACDATE Y-1 72277                                            */ 01-TIME
                                    485+* /*                                                                 01-TIME
00041A 4110 0002            00002   486+TRM35    LA    1,2(0,0)                     LOAD 1 TO SPECIFY UNIT 01-TIME
00041E 0A0B                         487+         SVC   11                           ISSUE TIME SVC         01-TIME
                                    488 *                                                                    00480001
000420 5010 A71C            0071C   489          ST    R1,SV                  USE A SAVEAREA AS A WORKAREA   00481001
000424 F342 A673 A71D 00673 0071D   490          UNPK  ENDRECD,SV+1(3)        DATE OF COMPILE                00482001
00042A 5060 A660            00660   491          ST    R6,ENDRECL             STORE LENGTH OF CSECT IN ENDREC 00483001
00042E 9104 D080      00080         492          TM    COMPFLGS,PROC          PROCEDURE COMPILATION ?        00484001
000432 4710 A440            00440   493          BO    TRM34                  YES, BRANCH                    00485001
000436 D207 A654 A3C6 00654 003C6   494          MVC   ENDRECN,TRM29          MOVE IN ENTRY POINT ESD NAME   00486001
00043C 47F0 A44C            0044C   495          B     TRM33                                                 00487001
                                    496 *                                                                    00488001
000440 D202 A649 A615 00649 00615   497 TRM34    MVC   ENDRECA,ADRPRP+1       ADDR TABLE IS ENTRY POINT      00489001
000446 D201 A652 A396 00652 00396   498          MVC   ENDRECID,TRM32ID       GET ESD ID FOR ENTRY POINT     00490001
00044C D203 A68C D0B0 0068C 000B0   499 TRM33    MVC   ENDRECK,PIDENT         INSERT PROGRAM IDENT           00491001
000452 FA30 D0B4 AA0D 000B4 00A0D   500          AP    CARDCNT,KP1            INCR SEQUENCE NUMBER           00492001
000458 F333 A690 D0B4 00690 000B4   501          UNPK  ENDRECC,CARDCNT        CONVERT TO CHARACTER           00493001
00045E 96F0 A693      00693         502          OI    ENDRECC+3,X'F0'        MAKE PRINTABLE                 00494001
000462 9140 D081      00081         503          TM    COMPFLGS+1,NLOAD       NOLOAD ?                       00495001
000466 4710 A47C            0047C   504          BO    TRM50A                 YES, BRANCH                    00496001
00046A 5810 D048            00048   505          L     R1,ALINDCB             R1 -> SYSLIN DCB               00497001

                                    507          PUT   (R1)                   PUT FOR SYSLIN                 00499001
00046E 1811                         508+         LR    1,R1                             LOAD PARAMETER REG 1 02-IHBIN
000470 58F0 1030            00030   509+         L     15,48(0,1)               LOAD PUT ROUTINE ADDR        01-PUT
000474 05EF                         510+         BALR  14,15                    LINK TO PUT ROUTINE          01-PUT

000476 D24F 1000 A644 00000 00644   512          MVC   0(L'ENDREC,R1),ENDREC                                 00501001
00047C 9120 D081      00081         513 TRM50A   TM    COMPFLGS+1,NDECK       NODECK ?                       00502001
000480 4710 A496            00496   514          BO    TRM51                  YES, BRANCH                    00503001
000484 5810 D060            00060   515          L     R1,APCHDCB             R1 -> SYSPUNCH DCB             00504001

                                    517          PUT   (R1)                   PUT FOR SYSPUNCH               00506001
000488 1811                         518+         LR    1,R1                             LOAD PARAMETER REG 1 02-IHBIN
00048A 58F0 1030            00030   519+         L     15,48(0,1)               LOAD PUT ROUTINE ADDR        01-PUT
00048E 05EF                         520+         BALR  14,15                    LINK TO PUT ROUTINE          01-PUT

000490 D24F 1000 A644 00000 00644   522          MVC   0(L'ENDREC,R1),ENDREC                                 00508001
                                    523 *                                                                    00509001
                                    524 *        PRINT STORAGE REQUIREMENTS                                  00510001
                                    525 *                                                                    00511001
000496 92FF D099      00099         526 TRM51    MVI   LINCNT+1,255           FORCE HEADINGS TO BE PRINTED   00512001
00049A 9240 D10D      0010D         527          MVI   PAGEHD1C+1,C' '        BLANK FIRST HEADING LINE       00513001
00049E D26C D10E D10D 0010E 0010D   528          MVC   PAGEHD1C+2(109),PAGEHD1C+1                            00514001
0004A4 D263 D190 D117 00190 00117   529          MVC   PAGEHD2D(L'PAGEHD2D),PAGEHD1D  BLANK SEC HEADING LINE 00515001
0004AA D263 D209 D117 00209 00117   530          MVC   PAGEHD3D(L'PAGEHD3D),PAGEHD1D  BLANK 3RD HEADING LINE 00516001
0004B0 D21D D13A A6A0 0013A 006A0   531          MVC   PAGEHD1D+35(L'HEAD1),HEAD1                            00517001
0004B6 4E60 A700            00700   532          CVD   R6,DEC                 CONVERT LENGTH OF OBJECT MODULE 00518001
0004BA 45E0 A556            00556   533          BAL   R14,EDNR               EDIT TO PRINTABLE FORMAT       00519001
0004BE D205 A6D0 A712 006D0 00712   534          MVC   KOBJSZB,EDAREA+2       MOVE OBJ SIZE INTO MSG         00520001
0004C4 45E0 A546            00546   535          BAL   R14,PRINTT             OBTAIN OUTPUT BUFFER           00521001
0004C8 D21D 1000 A6BE 00000 006BE   536          MVC   0(KOBJSZL,R1),KOBJSZ   MOVE MSG INTO BUFFER           00522001
0004CE 45E0 A546            00546   537          BAL   R14,PRINTT             OBTAIN OUTPUT BUFFER           00523001
0004D2 D216 1000 A6DC 00000 006DC   538          MVC   0(L'KDSA,R1),KDSA      SECOND PRINT LINE              00524001
0004D8 45E0 A546            00546   539          BAL   R14,PRINTT             OBTAIN OUTPUT BUFFER           00525001
0004DC 4120 0005            00005   540          LA    R2,5                   GET NO OF ENTRIES IN ONE LINE  00526001
0004E0 D20A 1000 A6F3 00000 006F3   541 TRM60    MVC   0(L'KPBN,R1),KPBN      BUILD THIRD PRINT LINE         00527001
0004E6 4110 1012            00012   542          LA    R1,L'KPBN+7(,R1)       BUMP BUFFER POINTER            00528001
0004EA 4620 A4E0            004E0   543          BCT   R2,TRM60               LOOP 5 TIMES                   00529001
0004EE 45E0 A546            00546   544          BAL   R14,PRINTT                                            00530001
0004F2 5830 D61C            0061C   545          L     R3,APBTAB4             INITIATE                       00531001
0004F6 4880 D09E            0009E   546          LH    R8,PBN                          REGISTERS             00532001
0004FA 1B44                         547          SR    R4,R4                                    FOR TABLE    00533001
0004FC 4120 0005            00005   548 TRM62    LA    R2,5                   INITIATE FOR EACH PRINT LINE   00534001
000500 4140 4001            00001   549 TRM61    LA    R4,1(,R4)                                  ENTRY      00535001
000504 4E40 A700            00700   550          CVD   R4,DEC                 CONVERT                        00536001
000508 F321 A718 A706 00718 00706   551          UNPK  BLNR,DEC+6(2)                    AND MOVE             00537001
00050E 96F0 A71A      0071A         552          OI    BLNR+2,X'F0'                               BLOCK      00538001
000512 D202 1000 A718 00000 00718   553          MVC   0(L'BLNR,R1),BLNR                                NUMBER 00539001
000518 4130 3008            00008   554          LA    R3,8(,R3)              GET PBTAB ENTRY                00540001
00051C 48B0 3004            00004   555          LH    R11,4(,R3)             GET DSA SIZE                   00541001
000520 4EB0 A700            00700   556          CVD   R11,DEC                CONVERT TO DECIMAL             00542001
000524 45E0 A556            00556   557          BAL   R14,EDNR               EDIT                           00543001
000528 D204 1006 A713 00006 00713   558          MVC   6(5,R1),EDAREA+3       MOVE IN VALUE                  00544001
00052E 0680                         559 TRM65    BCTR  R8,0                                                  00545001
000530 1288                         560          LTR   R8,R8                  ALL PBTAB ENTRIES HANDLED ?    00546001
000532 4780 A564            00564   561          BZ    TRM37                  YES                            00547001
000536 4110 1012            00012   562          LA    R1,18(,R1)             MAKE NEXT ENTRY                00548001
00053A 4620 A500            00500   563          BCT   R2,TRM61               IF LINE NOT FULL               00549001
00053E 45E0 A546            00546   564          BAL   R14,PRINTT             OBTAIN PRINT BUFFER            00550001
000542 47F0 A4FC            004FC   565          B     TRM62                                                 00551001
                                    566 *                                                                    00552001
                                    567 *        OBTAIN OUTPUT BUFFER                                        00553001
                                    568 *                                                                    00554001
                                    569 *        ON RETURN R1 -> BUFFER                                      00555001
                                    570 *                                                                    00556001
000546 90EF A71C            0071C   571 PRINTT   STM   R14,R15,SV             SAVE R14 AND R15               00557001
00054A 58F0 D0B8            000B8   572          L     R15,PRTRTADD                                          00558001
00054E 05EF                         573          BALR  R14,R15                CALL PRINT ROUTINE             00559001
000550 98EF A71C            0071C   574          LM    R14,R15,SV             RESTORE REGS                   00560001
000554 07FE                         575          BR    R14                                                   00561001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                    576 *                                                                       00562001
                                    577 *         EDIT DECIMAL NUMBER                                           00563001
                                    578 *                                                                       00564001
000556 D207 A710 A708 00710 00708   579 EDNR      MVC   EDAREA,EDPTRN            MOVE PATTERN                   00565001
00055C DE07 A710 A704 00710 00704   580           ED    EDAREA,DEC+4             EDIT                           00566001
000562 07FE                         581           BR    R14                                                     00567001
                                    582 *                                                                       00568001
                                    583 *         DIRECTORY RETURN BEFORE FREEMAIN                              00569001
                                    584 *                                                                       00570001
                      00564         585 IEX51ER1 EQU   *                                                        00571001
000564 5820 D62C            0062C   586 TRM37     L     R2,FREEMSIZ              GET INFO FOR AREA RELEASE      00572001
000568 5810 D628            00628   587           L     R1,FREEMADR                                             00573001
                                    588 *                                                                       00574001
                                    589           FREEMAIN R,LV=(2),A=(1)        RELEASE AREA                   00575001
                                    590+*         OS/VS2 RELEASE 3 VERSION  -- 10/25/74                         01-FREEM
00056C 1802                         591+          LR    0,2                                LOAD LENGTH          01-FREEM
00056E 4110 1000            00000   592+          LA    1,0(0,1)                           CLEAR HI ORDER BYTE  01-FREEM
000572 0A0A                         593+          SVC   10                                 ISSUE FREEMAIN SVC   01-FREEM
                                    594 *                                                                       00576001
000574 05F0                         595           BALR  R15,0                    LOAD NEW BASE REGISTER         00577001
                                    596 *                                                                       00578001
                      00576         597 IEX51ER2 EQU   *                        TERMINATION                     00579001
                 R:F  00576         598           USING *,R15                                                   00580001
** TXA533W USING range overlaps prior USING at statement 150.
** TXA301I Record 580 in SYSD.ALGOLF.ASM(IEX51)
                                    599 *                                                                       00581001
000576 5820 F012            00588   600 TRM38     L     R2,=A(IEX60000)          R2 -> IEX60000                 00582001
00057A 58E0 F016            0058C   601           L     R14,=A(IEX51002)         LOAD RETURN ADDR               00583001
00057E 4110 F1CA            00740   602           LA    R1,ERRINFO               ADDR INFO FOR ERROR ED ROUT    00584001
000582 07F2                         603           BR    R2                       GOTO ERROR MESSAGE EDITING     00585001
                                    604 *                                                                       00586001
                                    605 *         LTORG                                                         00587001
                                    606 *                                                                       00588001
000588                              607           LTORG                                                         00589001
000588 00000A10                     608                 =A(IEX60000)
00058C 00001238                     609                 =A(IEX51002)
                                    610 *                                                                       00590001
                                    611           DROP  R15                                                     00591001
                                    612 *                                                                       00592001
                                    613 *         GENERATE A PATTERN FOR ERROR MSG 188                          00593001
                                    614 *                                                                       00594001
000590 1B99                         615 ERR188    SR    R9,R9                                                   00595001
000592 4190 000A            0000A   616           LA    R9,10                                                   00596001
000596 19B9                         617           CR    R11,R9                   DS NUMBER 9 OR LOWER           00597001
000598 4740 A5B4            005B4   618           BL    ER1                      YES                            00598001
00059C 1BB9                         619           SR    R11,R9                   NO, SUBTRACT 10                00599001
00059E 42B0 A72F            0072F   620           STC   R11,EP188+11             STORE                          00600001
0005A2 DC00 A72F A735 0072F 00735   621           TR    EP188+11(1),NRTRA        CONVERT TO CHARACTER           00601001
0005A8 92F1 A72E      0072E         622           MVI   EP188+10,C'1'            INSERT FIRST DIGIT             00602001
0005AC 4190 000D            0000D   623           LA    R9,13                    GET L'ENTRY                    00603001
0005B0 47F0 A5C6            005C6   624           B     ER2                                                     00604001
                                    625 *                                                                       00605001
0005B4 42B0 A72E            0072E   626 ER1       STC   R11,EP188+10             STORE NUMBER                   00606001
0005B8 DC00 A72E A735 0072E 00735   627           TR    EP188+10(1),NRTRA        CONVERT IT                     00607001
0005BE 924B A72F      0072F         628           MVI   EP188+11,C'.'            INSERT PERIOD                  00608001
0005C2 4190 000C            0000C   629           LA    R9,12                    GET LENGTH OF ENTRY            00609001
0005C6 4290 A724            00724   630 ER2       STC   R9,EP188                 INSERT LENGTH OF ENTRY         00610001
0005CA 9680 A724      00724         631           OI    EP188,X'80'              PUT A TAG FOR BLANK SC         00611001
0005CE 0690                         632           BCTR  R9,0                     DECREASE BY ONE                00612001
0005D0 4290 A5D9            005D9   633           STC   R9,ER3+1                 STORE LENGTH IN MOVE INSTR     00613001
0005D4 58B0 D0C0            000C0   634           L     R11,NEXTERR              GET NEXT ENTRY IN POOL         00614001
0005D8 D200 B000 A724 00000 00724   635 ER3       MVC   0(0,R11),EP188           MOVE PATTERN                   00615001
0005DE 41B9 B001            00001   636           LA    R11,1(R9,R11)            UPDATE PTR TO NEXT FREE ENTRY  00616001
0005E2 50B0 D0C0            000C0   637           ST    R11,NEXTERR                                             00617001
0005E6 59B0 D0C4            000C4   638           C     R11,ENDPOOL              POOL FULL ?                    00618001
0005EA 4720 A5F4            005F4   639           BH    ER4                      YES                            00619001
0005EE 9680 D080      00080         640           OI    COMPFLGS,COMPMODE        SET SYNTAX CHECK MODE          00620001
0005F2 07FE                         641           BR    R14                      RETURN                         00621001
                                    642 *                                                                       00622001
0005F4 D203 B000 A731 00000 00731   643 ER4       MVC   0(4,R11),EP0             MOVE PATTERN EP0               00623001
0005FA 41B0 B004            00004   644           LA    R11,4(,R11)              UPDATE PTR                     00624001
0005FE 50B0 D0C0            000C0   645           ST    R11,NEXTERR              STORE IT                       00625001
000602 47F0 A564            00564   646           B     TRM37                    TERMINATE COMPILATION          00626001
                                    647 *                                                                       00627001
                                    648 *         CONSTANTS AND AREAS                                           00628001
                                    649 *                                                                       00629001
000606 0000
000608 00000000                     650 PRPTAR    DC    A(0)                     AREA TO HANDLE PRPOINTER       00630001
00060C 00000000                     651 DSTABPRP DC     A(0)                     PRPOINTER AT DSTAB BEGIN       00631001
000610 00000000                     652 AFSAPRP   DC    A(0)                     PRPOINTER AT AFSA              00632001
000614 00000000                     653 ADRPRP    DC    A(0)                     PRPOINTER AT APBT              00633001
000618 000F                         654 MDSN      DC    H'15'                    MAX DS NUMBER                  00634001
00061A 1000                         655 KH4096    DC    H'4096'                  LENGTH OF CONSTANT BLOCK       00635001
                                    656 *                                                                       00636001
                                    657 *         GENERATE MODEL DATASET TABLE ENTRY                            00637001
                                    658 *                                                                       00638001
                                    659           DSTABLE  DSECT=NO                                             00639001
00061C                              660+DSTABLE   DC    0F'0'                                                   01-DSTAB
00061C 00000000                     661+ADCB      DC    F'0'                     -> DCB                         01-DSTAB
000620 00000000                     662+R         DC    F'0'                     CHARACTER POINTER              01-DSTAB
000624 00000000                     663+RE        DC    F'0'                                                    01-DSTAB
000628 00000000                     664+NBB       DC    F'0'                                                    01-DSTAB
00062C 00000000                     665+BB        DC    F'0'                                                    01-DSTAB
000630 0001                         666+S         DC    H'1'                     RECORD POINTER                 01-DSTAB
000632 0050                         667+P         DC    H'80'                    RECORD LENGTH                  01-DSTAB
000634 02                           668+K         DC    X'02'                    NUMBER OF BLANK DELIM CHARS    01-DSTAB
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000635 00                          669+Q         DC    X'00'                 NO OF RECORDS PER SECTION        01-DSTAB
000636 0000                        670+DSF       DC    H'00'                 DATASET FLAGS                    01-DSTAB
                                   671+*                                                                      01-DSTAB
                                   672+*         DATASET FLAGS - DSF                                          01-DSTAB
                                   673+*                                                                      01-DSTAB
                     00080         674+DS0       EQU   X'80'                 DATASET OPEN                     01-DSTAB
                     00040         675+DS1       EQU   X'40'                                                  01-DSTAB
                     00020         676+DS2       EQU   X'20'                 LAST I/O OUTPUT                  01-DSTAB
                     00010         677+DS3       EQU   X'10'                                                  01-DSTAB
                     00008         678+DS4       EQU   X'08'                                                  01-DSTAB
                     00004         679+DS5       EQU   X'04'                                                  01-DSTAB
                     00002         680+DS6       EQU   X'02'                 OPEN FOR OUTPUT                  01-DSTAB
                     00001         681+DS7       EQU   X'01'                 END OF FILE                      01-DSTAB
                                   682+*                                                                      01-DSTAB
                                   683+*         DATASET FLAGS - DSF+1                                        01-DSTAB
                                   684+*                                                                      01-DSTAB
                     00080         685+DS8       EQU   X'80'                 END OF DATA                      01-DSTAB
                     00040         686+DS9       EQU   X'40'                                                  01-DSTAB
                     00020         687+DS10      EQU   X'20'                 OPENED BY SYSACT 12              01-DSTAB
                     00010         688+DS11      EQU   X'10'                 INDICATE IHIERR-ROUT             01-DSTAB
                     00008         689+DSEOD     EQU   X'08'                                                  01-DSTAB
                     00004         690+DSIOERR   EQU   X'04'                 I/O ERROR                        01-DSTAB
                     00002         691+DS14      EQU   X'02'                 DATASET OPENED                   01-DSTAB
                     00001         692+DS15      EQU   X'01'                 CLOSE FROM IHIERR                01-DSTAB
                                   693+*                                                                      01-DSTAB
000638 00000000                    694+NOTEADR   DC    F'0'                                                   01-DSTAB
00063C 0000                        695+BL        DC    H'0'                  LRECL+ TWO ARB                   01-DSTAB
00063E 0000                        696+          DC    H'0'                                                   01-DSTAB
                                   697+*                                                                      01-DSTAB
                     00024         698+DSTABLEL  EQU   *-DSTABLE             L'DSTABLE ENTRY                  01-DSTAB
                                   699+*                                                                      01-DSTAB
                                   700 *                                                                      00640001
000640 0000                        701 DSTABLGT  DC    H'0'                  LENGTH OF DSTAB WITHOUT PGCF     00641001
                                   702 *                                                                      00642001
                                   703 *         END RECORD                                                   00643001
                                   704 *                                                                      00644001
000642 0000
000644                             705           DC    0F'0'                                                  00645001
000644 4040404040404040            706 ENDREC    DC    CL80' '            *  IMAGE FOR END RECORD             00646001
000694               00694 00644   707           ORG   ENDREC             |  COLS                             00647001
000644 02                          708           DC    X'02'              |  1                                00648001
000645 C5D5C4                      709           DC    C'END'             |  2-4                              00649001
000648 40                          710           DC    C' '               |  5                                00650001
000649 404040                      711 ENDRECA   DC    C'   '             |  6-8   ENTRY ADDR                 00651001
00064C 404040404040                712           DC    C'      '          |  9-14                             00652001
000652 4040                        713 ENDRECID  DC    C'  '              |  15-16 ESDID OF ENTRY POINT       00653001
000654 4040404040404040            714 ENDRECN   DC    C'        '        |  17-24                            00654001
00065C 40404040                    715           DC    C'    '            |  25-28                            00655001
000660 40404040                    716 ENDRECL   DC    C'    '            |  29-32 CSECT LENGTH               00656001
000664 F1                          717           DC    C'1'               |  33    NUMBER OF IDR ITEMS        00657001
000665 F3F6F0E2C1D3F5F3            718           DC    C'360SAL531 '      |  34-43 TRANSLATOR PRODUCT IDR     00658001
00066F F0F2F0F1                    719           DC    C'0201'            |  44-47 VERSION AND RELEASE NUMBER 00659001
000673 F9F9F9F9F9                  720 ENDRECD   DC    C'99999'           |  48-52 PROCESSING DATE            00660001
000678               00678 0068C   721           ORG   ENDREC+72          |                                   00661001
00068C 40404040                    722 ENDRECK   DC    CL4' '             |  73-76 DECK ID                    00662001
000690 40404040                    723 ENDRECC   DC    CL4' '             V  77-80 RECORD COUNT               00663001
000694               00694 00694   724           ORG   ,                                                      00664001
                                   725 *                                                                      00665001
000694 00000000                    726 APBT      DC    A(0)                  ADDR OF PBT                      00666001
000698 00000000                    727 ALAT      DC    A(0)                  ADDR OF LAT                      00667001
00069C 20                          728 SW        DC    X'20'                 SWITCH FOR LONG/SHORT PREC       00668001
00069D 000000                      729 ASTART    DC    AL3(0)                ADDR OF FIRST INSTRUCTION        00669001
                                   730 *                                                                      00670001
0006A0 E2E3D6D9C1C7C540            731 HEAD1     DC    C'STORAGE REQUIREMENTS (DECIMAL)'                      00671001
                                   732 *                                                                      00672001
0006BE D6C2D1C5C3E340D4            733 KOBJSZ    DC    C'OBJECT MODULE SIZE'                                  00673001
0006D0 404040404040                734 KOBJSZB   DC    CL6' '                                                 00674001
0006D6 40C2E8E3C5E2                735           DC    C' BYTES'                                              00675001
                     0001E         736 KOBJSZL   EQU   *-KOBJSZ              L'OBJECT SIZE MESSAGE            00676001
                                   737 *                                                                      00677001
0006DC C4C1E3C140E2E3D6            738 KDSA      DC    C'DATA STORAGE AREA SIZES'                             00678001
0006F3 D7C2D5404040C2E8            739 KPBN      DC    C'PBN    BYTES'                                        00679001
0006FE 0000
000700 0000000000000000            740 DEC       DC    D'0'                  FOR CONVERSION OF NUMBERS        00680001
000708 4020202020202020            741 EDPTRN    DC    X'4020202020202020'   PATTERN FOR EDITING              00681001
000710 4040404040404040            742 EDAREA    DC    CL8' '                EDITING OF NUMBERS               00682001
000718 404040                      743 BLNR      DC    CL3' '                FOR CONVERSION OF BLOCK NUMBER   00683001
00071B 00
00071C 0000000000000000            744 SV        DC    2F'0'                 SAVE AREA                        00684001
                                   745 *                                                                      00685001
000724 00BC0000                    746 EP188     DC    X'00BC0000'           ERROR PATTERN FOR MESSAGE 188    00686001
000728 C4E2D5407E40F0F0            747           DC    C'DSN = 00.'                                           00687001
                                   748 *                                                                      00688001
000731 04000000                    749 EP0       DC    X'04000000'           ERROR PATTERN FOR MESSAGE 0      00689001
                                   750 *                                                                      00690001
000735 F0F1F2F3F4F5F6F7            751 NRTRA     DC    C'0123456789'         TRANSLATION OF DS NUMBER         00691001
                                   752 *                                                                      00692001
00073F 00
000740 00000000                    753 ERRINFO   DC    V(IEX51M00)           ADDR OF MESSAGE TEXTS            00693001
000744 00000000                    754           DC    V(IEX51M01)           ADDR OF ADDR TABLE               00694001
000748 000C                        755           DC    H'12'                 MODIFICATION NUMBER              00695001
                                   756 *                                                                      00696001
00074A 0000
00074C                             757           DC    0F'0'                                                  00697001
                                   758 *                                                                      00698001
                                   759 *         LIBRARY ROUTINES - SHORT                                     00699001
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  Active USINGs: WORKAREA,R13  IEX51000,R10

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    760 *                                                                      00700001
00074C E2E8E2C3E3                   761 SHRTAB   DC    C'SYSCT'                                                00701001
000751 E2E2D84040                   762          DC    C'SSQ  '                                                00702001
000756 E2E2C3E240                   763          DC    C'SSCS '                                                00703001
00075B E2E2C3C340                   764          DC    C'SSCC '                                                00704001
000760 E2C1E34040                   765          DC    C'SAT  '                                                00705001
000765 E2D3D64040                   766          DC    C'SLO  '                                                00706001
00076A E2C5E74040                   767          DC    C'SEX  '                                                00707001
00076F C9E2E8D4C2                   768          DC    C'ISYMB'                                                00708001
000774 C9C4C5C9D9                   769          DC    C'IDEIR'                                                00709001
000779 C9C4C5C9C9                   770          DC    C'IDEII'                                                00710001
00077E C9C2D6D6D3                   771          DC    C'IBOOL'                                                00711001
000783 C9C1D9D9E8                   772          DC    C'IARRY'                                                00712001
000788 C9C1D9D9E3                   773          DC    C'IARRT'                                                00713001
00078D C9C2C1D9D9                   774          DC    C'IBARR'                                                00714001
000792 D6E2E8D4C2                   775          DC    C'OSYMB'                                                00715001
000797 E2D6D9C5D3                   776          DC    C'SOREL'                                                00716001
00079C D6C9D5E3C7                   777          DC    C'OINTG'                                                00717001
0007A1 D6C2D6D6D3                   778          DC    C'OBOOL'                                                00718001
0007A6 D6C1D9D9E8                   779          DC    C'OARRY'                                                00719001
0007AB D6E3C1D9D9                   780          DC    C'OTARR'                                                00720001
0007B0 D6C2C1D9D9                   781          DC    C'OBARR'                                                00721001
0007B5 D6E2E3D9C7                   782          DC    C'OSTRG'                                                00722001
0007BA C7D7D9D7E3                   783          DC    C'GPRPT'                                                00723001
0007BF C7D7D9C7E3                   784          DC    C'GPRGT'                                                00724001
0007C4 C6C9C94040                   785          DC    C'FII  '                                                00725001
0007C9 C6D9C94040                   786          DC    C'FRI  '                                                00726001
0007CE C6D9D94040                   787          DC    C'FRR  '                                                00727001
                                    788 *                                                                      00728001
                                    789 *        LIBRARY ROUTINES - LONG                                       00729001
                                    790 *                                                                      00730001
0007D3 E2E8E2C3E3                   791 LNGTAB   DC    C'SYSCT'                                                00731001
0007D8 D3E2D84040                   792          DC    C'LSQ  '                                                00732001
0007DD D3E2C3E240                   793          DC    C'LSCS '                                                00733001
0007E2 D3E2C3C340                   794          DC    C'LSCC '                                                00734001
0007E7 D3C1E34040                   795          DC    C'LAT  '                                                00735001
0007EC D3D3D64040                   796          DC    C'LLO  '                                                00736001
0007F1 D3C5E74040                   797          DC    C'LEX  '                                                00737001
0007F6 C9E2E8D4C2                   798          DC    C'ISYMB'                                                00738001
0007FB C9C4C5C9D9                   799          DC    C'IDEIR'                                                00739001
000800 C9C4C5C9C9                   800          DC    C'IDEII'                                                00740001
000805 C9C2D6D6D3                   801          DC    C'IBOOL'                                                00741001
00080A C9C1D9D9E8                   802          DC    C'IARRY'                                                00742001
00080F C9C1D9D9E3                   803          DC    C'IARRT'                                                00743001
000814 C9C2C1D9D9                   804          DC    C'IBARR'                                                00744001
000819 D6E2E8D4C2                   805          DC    C'OSYMB'                                                00745001
00081E D3D6D9C5D3                   806          DC    C'LOREL'                                                00746001
000823 D6C9D5E3C7                   807          DC    C'OINTG'                                                00747001
000828 D6C2D6D6D3                   808          DC    C'OBOOL'                                                00748001
00082D D6C1D9D9E8                   809          DC    C'OARRY'                                                00749001
000832 D6E3C1D9D9                   810          DC    C'OTARR'                                                00750001
000837 D6C2C1D9D9                   811          DC    C'OBARR'                                                00751001
00083C D6E2E3D9C7                   812          DC    C'OSTRG'                                                00752001
000841 C7D7D9D7E3                   813          DC    C'GPRPT'                                                00753001
000846 C7D7D9C7E3                   814          DC    C'GPRGT'                                                00754001
00084B C6C9C94040                   815          DC    C'FII  '                                                00755001
000850 C6C4C94040                   816          DC    C'FDI  '                                                00756001
000855 C6C4C44040                   817          DC    C'FDD  '                                                00757001
                                    818 *                                                                      00758001
                                    819 *********************************************************************** 00759001
                                    820 *                                                                      00760001
                                    821 *        S U B R O U T I N E   G E N E R A T E                         00761001
                                    822 *                                                                      00762001
                                    823 *********************************************************************** 00763001
                                    824 *                                                                      00764001
                                    825 *        REGISTER DEFINITIONS                                          00765001
                                    826 *                                                                      00766001
                                    827 *        R1                            OUTPUT RECORD POINTER           00767001
                                    828 *        R2                            ADDR OF DATA                    00768001
                                    829 *        R3                            TYPE OF RECORD TO BE GENERATED  00769001
                                    830 *        R4                            RETURN REGISTER                 00770001
                                    831 *        R14                           LENGTH OF DATA FROM CALL        00771001
                                    832 *        R15                           LENGTH WITHIN RECORD            00772001
                                    833 *                                                                      00773001
                                    834 *        BIT PATTERNS                                                  00774001
                                    835 *                                                                      00775001
                      00000         836 SDENTRY  EQU   X'00'                   SD ENTRY IDENTIFICATION         00776001
                      00001         837 LDENTRY  EQU   X'01'                   LD ENTRY IDENTIFICATION         00777001
                      0000C         838 RLDFLAG  EQU   B'00001100'             FLAG USED IN RLD ENTRY          00778001
                                    839 *                                                                      00779001
                                    840 *        GENERATE ESD RECORDS                                          00780001
                                    841 *                                                                      00781001
00085A 41E0 0010            00010   842 GENESD   LA    R14,16                  LENGTH ALWAYS 16                00782001
00085E 4130 A968            00968   843          LA    R3,ESDT                 INDICATE ESD CALL               00783001
000862 47F0 A88C            0088C   844          B     GEN1                                                    00784001
                                    845 *                                                                      00785001
                                    846 *        GENERATE TXT RECORDS                                          00786001
                                    847 *                                                                      00787001
000866 4140 E002            00002   848 GENTXTS  LA    R4,2(,R14)              COMPUTE RETURN ADDR             00788001
00086A 48E0 E000            00000   849          LH    R14,0(,R14)             LOAD LENGTH GIVEN IN CALL       00789001
00086E 4130 A9A8            009A8   850 GEN2     LA    R3,TXTT                 INDICATE TXT CALL               00790001
000872 47F0 A88C            0088C   851          B     GEN1                    CONTINUE COMMON PART            00791001
                                    852 *                                                                      00792001
                                    853 *        GENERATE RLD RECORDS                                          00793001
                                    854 *                                                                      00794001
000876 4140 E006            00006   855 GENRLD   LA    R4,6(,R14)              COMPUTE RETURN ADDR             00795001
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  Active USINGs: WORKAREA,R13  IEX51000,R10

  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

00087A 4130 A9CE            009CE   856          LA    R3,RLDT                INDICATE RLD CALL                00796001
00087E D203 A9D6 E002 009D6 00002   857          MVC   RANDP(4),2(R14)        INSERT NEW R AND P               00797001
000884 48E0 E000            00000   858          LH    R14,0(,R14)            LOAD LENGTH GIVEN IN CALL        00798001
000888 89E0 0001            00001   859          SLL   R14,1                  DOUBLE LENGTH                    00799001
00088C 5810 D0A8            000A8   860 GEN1     L     R1,SAVOUTA             LOAD ADDR OF OUT RECORD          00800001
000890 D502 1001 3001 00001 00001   861          CLC   1(3,R1),1(R3)          RECORD RIGHT TYPE ?              00801001
000896 4770 A8CE            008CE   862          BNE   GEN3                   NO, CALL FOR NEW                 00802001
00089A D501 100A 300C 0000A 0000C   863          CLC   10(2,R1),12(R3)        RECORD FILLED ?                  00803001
0008A0 47B0 A8CE            008CE   864          BNL   GEN3                   YES, CALL FOR NEW                00804001
0008A4 41F0 0038            00038   865 GEN6     LA    R15,56                                                  00805001
0008A8 4800 100A            0000A   866          LH    R0,10(,R1)             R0=LENGTH OF DATA IN REC         00806001
0008AC 1BF0                         867          SR    R15,R0                 R15=EMPTY POS LEFT IN RECORD     00807001
0008AE 19FE                         868          CR    R15,R14                ENOUGH SPACE LEFT ?              00808001
0008B0 4740 A8B6            008B6   869          BL    *+6                    NO                               00809001
0008B4 18FE                         870          LR    R15,R14                YES, R15=LENGTH FROM CALL        00810001
0008B6 1AF0                         871          AR    R15,R0                                                  00811001
0008B8 40F0 100A            0000A   872          STH   R15,10(,R1)            INSERT NEW LENGTH INTO RECORD    00812001
0008BC 1BF0                         873          SR    R15,R0                                                  00813001
0008BE 1A10                         874          AR    R1,R0                  START ADDR WITHIN RECORD         00814001
0008C0 1BEF                         875          SR    R14,R15                REMAINING LENGTH                 00815001
0008C2 47F0 300E            0000E   876          B     14(,R3)                TO DIFFERENT MOVE ROUTINES       00816001
                                    877 *                                                                      00817001
0008C6 12EE                         878 GEN4     LTR   R14,R14                MORE INFORMATION MUST BE MOVED ? 00818001
0008C8 4720 A8CE            008CE   879          BH    GEN3                   YES                              00819001
0008CC 07F4                         880          BR    R4                     NO, RETURN                       00820001
                                    881 *                                                                      00821001
                                    882 *        CALL FOR NEW OUTPUT RECORD                                    00822001
                                    883 *                                                                      00823001
0008CE 50E0 AA00            00A00   884 GEN3     ST    R14,SAVELT             SAVE LENGTH                      00824001
0008D2 9160 D081      00081         885          TM    COMPFLGS+1,NLOAD+NDECK DECK AND LOAD SPECIFIED ?        00825001
0008D6 4780 A8FE            008FE   886          BZ    BOTH                   YES                              00826001
0008DA 9120 D081      00081         887          TM    COMPFLGS+1,NDECK       ONLY DECK ?                      00827001
0008DE 5810 D060            00060   888          L     R1,APCHDCB             R1 -> SYSPUNCH DCB               00828001
0008E2 4780 A8EA            008EA   889          BZ    PUT1                   YES                              00829001
0008E6 5810 D048            00048   890 PUT1A    L     R1,ALINDCB             R1 -> SYSLIN DCB                 00830001
                                    891 *                                                                      00831001
                                    892 PUT1     PUT   (R1)                   PUT FOR SYSLIN AND SYSPUNCH IF   00832001
0008EA 1811                         893+PUT1     LR    1,R1                             LOAD PARAMETER REG 1   02-IHBIN
0008EC 58F0 1030            00030   894+         L     15,48(0,1)              LOAD PUT ROUTINE ADDR           01-PUT
0008F0 05EF                         895+         BALR  14,15                   LINK TO PUT ROUTINE             01-PUT
                                    896 *                                                                      00833001
0008F2 5010 D0A8            000A8   897          ST    R1,SAVOUTA             ONLY SYSPUNCH SPECIFIED          00834001
0008F6 58E0 AA00            00A00   898          L     R14,SAVELT             RESTORE LENGTH                   00835001
0008FA 47F0 A920            00920   899          B     PUNCHOUT                                                00836001
                                    900 *                                                                      00837001
0008FE 58E0 D0AC            000AC   901 BOTH     L     R14,OUTAREA2           COPY SYSLIN BUFFER TO SYSPUNCH   00838001
000902 5810 D0A8            000A8   902          L     R1,SAVOUTA                                              00839001
000906 D24F E000 1000 00000 00000   903          MVC   0(80,R14),0(R1)        BUFFER                           00840001
00090C 5810 D060            00060   904 PUT2     L     R1,APCHDCB             R1 -> SYSPUNCH DCB               00841001
                                    905 *                                                                      00842001
                                    906          PUT   (R1)                   PUT FOR SYSPUNCH WHEN BOTH HAS   00843001
000910 1811                         907+         LR    1,R1                             LOAD PARAMETER REG 1   02-IHBIN
000912 58F0 1030            00030   908+         L     15,48(0,1)              LOAD PUT ROUTINE ADDR           01-PUT
000916 05EF                         909+         BALR  14,15                   LINK TO PUT ROUTINE             01-PUT
                                    910 *                                                                      00844001
000918 5010 D0AC            000AC   911          ST    R1,OUTAREA2            BEEN SPECIFIED                   00845001
00091C 47F0 A8E6            008E6   912          B     PUT1A                  GOTO PUT SYSLIN                  00846001
                                    913 *                                                                      00847001
000920 D203 1000 3000 00000 00000   914 PUNCHOUT MVC   0(4,R1),0(R3)          INSERT FIRST 4 BYTES             00848001
000926 9240 1004      00004         915          MVI   4(R1),C' '             INSERT ONE BLANK                 00849001
00092A D242 1005 1004 00005 00004   916          MVC   5(67,R1),4(R1)         BLANK OUTPUT RECORD              00850001
000930 D203 1048 D0B0 00048 000B0   917          MVC   72(4,R1),PIDENT        INSERT PROGRAM IDENT             00851001
000936 FA30 D0B4 AA0D 000B4 00A0D   918          AP    CARDCNT,KP1            INCR SEQUENCE NUMBER             00852001
00093C F333 104C D0B4 0004C 000B4   919          UNPK  76(4,R1),CARDCNT       CONVERT TO CHARACTER             00853001
000942 96F0 104F      0004F         920          OI    79(R1),X'F0'           MAKE PRINTABLE                   00854001
000946 D201 100A 3004 0000A 00004   921          MVC   10(2,R1),4(R3)         INSERT INITIAL LENGTH            00855001
00094C D205 100E 3006 0000E 00006   922          MVC   14(6,R1),6(R3)         INSERT ESID + R AND P            00856001
000952 D502 A9A9 3001 009A9 00001   923          CLC   TXTT+1(3),1(R3)        TXT RECORD PROCESSED ?           00857001
000958 4770 A8A4            008A4   924          BNE   GEN6                   NO                               00858001
00095C 5061 0004            00004   925          ST    R6,4(R1)               YES, INSERT R6                   00859001
000960 9240 1004      00004         926          MVI   4(R1),C' '                                              00860001
000964 47F0 A8A4            008A4   927          B     GEN6                                                    00861001
                                    928 *                                                                      00862001
                                    929 *        ESD RECORD                                                    00863001
                                    930 *                                                                      00864001
000968                              931          DC    0H'0'                                                   00865001
000968 02                           932 ESDT     DC    X'02'                  RECORD CODE                      00866001
000969 C5E2C4                       933          DC    C'ESD'                 IDENTIFICATION                   00867001
00096C 0000                         934          DC    H'0'                   INITIAL LENGTH 0                 00868001
00096E 404040404040                 935          DC    C'      '                                               00869001
000974 0030                         936          DC    H'48'                  MAXIMUM LENTH IN RECORD          00870001
                                    937 *                                                                      00871001
                                    938 *        MOVE ESD INFORMATION TO OUTAREA                               00872001
                                    939 *                                                                      00873001
000976 D20F 1010 2000 00010 00000   940 GEN7     MVC   16(16,R1),0(R2)        MOVE DATA TO OUTAREA             00874001
00097C 9501 2008      00008         941          CLI   8(R2),LDENTRY          LD ENTRY MOVED ?                 00875001
000980 4782 0010            00010   942          BE    16(R2)                 YES, RETURN TO CALLING ROUTINE   00876001
000984 D206 1019 AA06 00019 00A06   943          MVC   25(L'ESDCON,R1),ESDCON CHANGE LAST PART OF ENTRY        00877001
00098A 4830 AA04            00A04   944          LH    R3,ESID                                                 00878001
00098E 4130 3001            00001   945          LA    R3,1(,R3)              INCR ESD ID                      00879001
000992 4030 AA04            00A04   946          STH   R3,ESID                STORE NEW ESID NUMBER            00880001
000996 1B10                         947          SR    R1,R0                                                   00881001
000998 9540 100E      0000E         948          CLI   14(R1),C' '            FIRST SD OR ER ENTRY ?           00882001
00099C 4772 000A            0000A   949          BNE   10(R2)                 NO, RETURN TO CALLING ROUTINE    00883001
0009A0 4031 000E            0000E   950          STH   R3,14(R1)              YES, INSERT ESID NUMBER          00884001
0009A4 47F2 000A            0000A   951          B     10(R2)                 RETURN TO CALLING ROUTINE        00885001
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  Active USINGs: WORKAREA,R13  IEX51000,R10

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                    952 *                                                                        00886001
                                    953 *        TXT RECORD                                                      00887001
                                    954 *                                                                        00888001
0009A8                              955          DC    0H'0'                                                     00889001
0009A8 02                           956 TXTT     DC    X'02'                  RECORD CODE                        00890001
0009A9 E3E7E3                       957          DC    C'TXT'                 IDENTIFICATION                     00891001
0009AC 0000                         958          DC    H'0'                   INITIAL LENGTH 0                   00892001
0009AE 0001                         959          DC    H'1'                   ESID                               00893001
0009B0 40404040                     960          DC    C'    '                                                   00894001
0009B4 0038                         961          DC    H'56'                  MAXIMUM LENGTH                     00895001
                                    962 *                                                                        00896001
                                    963 *        MOVE TXT INFORMATION OUTAREA                                    00897001
                                    964 *                                                                        00898001
0009B6 06F0                         965 GEN8     BCTR  R15,0                  DECR LENGTH                        00899001
0009B8 42F0 A9BD            009BD   966          STC   R15,*+5                INSERT PROPER LENGTH TO MOVE       00900001
0009BC D200 1010 2000 00010 00000   967          MVC   16(0,R1),0(R2)         MOVE DATA TO OUTAREA               00901001
0009C2 416F 6001            00001   968          LA    R6,1(R15,R6)           INCREASE PROGRAM POINTER           00902001
0009C6 412F 2001            00001   969          LA    R2,1(R15,R2)           MODIFY DATA ADDR                   00903001
0009CA 47F0 A8C6            008C6   970          B     GEN4                   OUT OF MOVE TXT ROUTINE            00904001
                                    971 *                                                                        00905001
                                    972 *        RLD RECORD                                                      00906001
                                    973 *                                                                        00907001
0009CE                              974          DC    0H'0'                                                     00908001
0009CE 02                           975 RLDT     DC    X'02'                  RECORD CODE                        00909001
0009CF D9D3C4                       976          DC    C'RLD'                 IDENTIFICATION                     00910001
0009D2 0000                         977          DC    H'0'                                                      00911001
0009D4 4040                         978          DC    C'  '                                                     00912001
0009D6 40404040                     979 RANDP    DC    C'    '                R AND P                            00913001
0009DA 0038                         980          DC    H'56'                  MAXIMUM LENGTH IN RECORD           00914001
                                    981 *                                                                        00915001
                                    982 *        MOVE RLD INFORMATION TO OUTAREA                                 00916001
                                    983 *                                                                        00917001
0009DC 1AF1                         984 GEN9     AR    R15,R1                 INDICATE LAST ENTRY                00918001
0009DE D203 1010 A9D6 00010 009D6   985 GEN5     MVC   16(4,R1),RANDP         INSERT R AND P                     00919001
0009E4 5020 1014            00014   986          ST    R2,20(,R1)             MOVE PROGRAM POINTER VALUE         00920001
0009E8 920C 1014      00014         987          MVI   20(R1),RLDFLAG         FLAG TO OUTAREA                    00921001
0009EC 4110 1008            00008   988          LA    R1,8(,R1)              NEXT ENTRY                         00922001
0009F0 4120 2004            00004   989          LA    R2,4(,R2)              NEXT PROGRAM POINTER VALUE         00923001
0009F4 191F                         990          CR    R1,R15                 LAST COLUMN FILLED ?               00924001
0009F6 4740 A9DE            009DE   991          BL    GEN5                   NO, CONTINUE                       00925001
0009FA 47F0 A8C6            008C6   992          B     GEN4                   OUT OF MOVE RLD ROUTINE            00926001
                                    993 *                                                                        00927001
                                    994 *        VARIABLES AND CONSTANTS                                         00928001
                                    995 *                                                                        00929001
0009FE 0000
000A00 00000000                     996 SAVELT   DC    F'0'                   SAVE AREA FOR LENGTH               00930001
000A04 0001                         997 ESID     DC    H'1'                   ESID VARIABLE 1 AT START           00931001
000A06 00000040404040               998 ESDCON   DC    X'00000040404040'      ESD CONSTANT 7 BYTES               00932001
000A0D 1C                           999 KP1      DC    PL1'1'                 INCREMENT CARD COUNTER             00933001
                                   1000 *                                                                        00934001
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  Active USINGs: WORKAREA,R13  IEX51000,R10

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   1002 *                                                                        00936001
                                   1003          COPY  IEX60000                                                  00937001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

                                   1005=*                                                              00002001
                                   1006=*       COMPONENT ID - 360S-AL-531 ALGOL F COMPILER            00003001
                                   1007=*                                                              00004001
000A10                00A10 00824  1008=IEX60000 CSECT                                                 00005001
                                   1009=*                                                              00006001
                R:2   00A10        1010=        USING IEX60000,R2                                      00007001
                                   1011=*                                                              00008001
                                   1012=*       REGISTER DEFINITIONS                                   00009001
                                   1013=*                                                              00010001
                                   1014=*       R1                     POINTS TO PARAMETER LIST        00011001
                                   1015=*       R1                     RETURNS ADDR OF PRINT BUFFER    00012001
                                   1016=*       R2                     BASE REGISTER FOR COTEMER       00013001
                                   1017=*       R4                     BASE REGISTER FOR MESSAGE POOL  00014001
                                   1018=*       R5                     POINTER TO ENTRY IN ERROR POOL  00015001
                                   1019=*       R6                     POINTER TO INSERTION CODE       00016001
                                   1020=*       R7                     POINTER TO ENTRY IN MSG POOL    00017001
                                   1021=*       R14                    PTR TO MESSAGE TEXT WORKAREA    00018001
                                   1022=*                                                              00019001
                                   1023=*       INITIALIZATION                                         00020001
                                   1024=*                                                              00021001
                R:D   00000        1025=        USING WORKAREA,R13     BASEREG FOR WORKAREA DSECT      00022001
000A10 D209 2518 1000 00F28 00000  1026=        MVC   AWEMPOOL(10),0(R1)   GET ADDRS AND MOD NUMBER    00023001
000A16 4190 233E            00D4E  1027=COT00   LA    R9,WDIRET1       STORE RETURN ADDR               00024001
000A1A 5090 D090            00090  1028=        ST    R9,ERET          IN WORKAREA                     00025001
000A1E 90EF 252C            00F3C  1029=        STM   R14,R15,SVAR1    SAVE RETURN ADDR AND BASE       00026001
000A22 9190 D082      00082        1030=        TM    COMPFLGS+2,PRT+PRTNO   SYSPRINT DOWN/NOT OPENED ? 00027001
000A26 4770 2346            00D56  1031=        BNZ   COT18            YES, GIVE CONSOLE MESSAGE       00028001
000A2A 5850 D0BC            000BC  1032=        L     R5,ERRPOOL       ADDR ERROR POOL                 00029001
000A2E 5550 D0C0            000C0  1033=        CL    R5,NEXTERR       ERROR POOL EMPTY ?              00030001
000A32 4780 231C            00D2C  1034=        BE    COT28            YES                             00031001
000A36 D50A D133 24DE 00133 00EEE  1035=        CLC   PAGEHEAD+39(L'HEADD1),HEADD1  HEADINGS ALREADY SET ?  00032001
000A3C 4780 2056            00A66  1036=        BE    COT01            YES, BYPASS HEADINGS            00033001
000A40 92FF D099      00099        1037=        MVI   LINCNT+1,255     FORCE HEADINGS TO BE PRINTED    00034001
000A44 9240 D10D      0010D        1038=        MVI   PAGEHD1C+1,C' '  BLANK FIRST HEADING LINE        00035001
000A48 D26C D10E D10D 0010E 0010D  1039=        MVC   PAGEHD1C+2(109),PAGEHD1C+1                       00036001
000A4E D263 D190 D117 00190 00117  1040=        MVC   PAGEHD2D(L'PAGEHD2D),PAGEHD1D  BLANK 2ND HEADING LINE  00037001
000A54 D263 D209 D117 00209 00117  1041=        MVC   PAGEHD3D(L'PAGEHD3D),PAGEHD1D  BLANK 3RD HEADING LINE  00038001
000A5A D20A D13E 24DE 0013E 00EEE  1042=        MVC   PAGEHD1D+39(L'HEADD1),HEADD1   MOVE IN HEADD1    00039001
000A60 D21A D190 24E9 00190 00EF9  1043=        MVC   PAGEHD2D(L'HEADD2),HEADD2      MOVE IN HEADD2    00040001
                                   1044=*                                                              00041001
                                   1045=*       HANDLING OF THE ENTRIES IN ERROR POOL                  00042001
                                   1046=*                                                              00043001
000A66 5840 2518            00F28  1047=COT01   L     R4,AWEMPOOL      ADDR ERROR MESSAGE POOL         00044001
000A6A 1B77                        1048=        SR    R7,R7                                            00045001
000A6C 4370 5001            00001  1049=        IC    R7,1(,R5)        GET ERROR MSG NUMBER            00046001
000A70 41A0 00C8            000C8  1050=        LA    R10,200                                          00047001
000A74 197A                        1051=        CR    R7,R10           DIRECTORY MESSAGE ?             00048001
000A76 4740 2070            00A80  1052=        BL    COT36            NO                              00049001
000A7A 48A0 2520            00F30  1053=        LH    R10,MODNUMB      YES, MODIFY NUMBER              00050001
000A7E 1B7A                        1054=        SR    R7,R10                                           00051001
000A80 8970 0002            00002  1055=COT36   SLL   R7,2             GET IT FOUR TIMES               00052001
000A84 5890 251C            00F2C  1056=        L     R9,AWADDTAB      ADDR ADDR TABLE                 00053001
000A88 1A79                        1057=        AR    R7,R9            GET CORRECT ENTRY               00054001
000A8A 5870 7000            00000  1058=        L     R7,0(,R7)        LOAD ADDR TO ENTRY IN ERMSG POOL 00055001
                                   1059=*                                                              00056001
                                   1060=*       GET LENGTH OF INSERT CODE PART                         00057001
                                   1061=*                                                              00058001
000A8E 4160 7002            00002  1062=COT02   LA    R6,2(,R7)        POINT TO FIRST INSERTION CODE   00059001
000A92 1B99                        1063=        SR    R9,R9                                            00060001
000A94 4390 7001            00001  1064=        IC    R9,1(,R7)        GET NUMBER OF INSERTION CODES   00061001
000A98 18A9                        1065=        LR    R10,R9                                           00062001
000A9A 18C9                        1066=        LR    R12,R9                                           00063001
000A9C 41C0 C001            00001  1067=        LA    R12,1(,R12)      SET INSERTION CODE COUNTER      00064001
000AA0 8990 0001            00001  1068=        SLL   R9,1             DOUBLE IT                       00065001
000AA4 1A9A                        1069=        AR    R9,R10           GET IT 3 TIMES                  00066001
                                   1070=*                                                              00067001
                                   1071=*       HANDLE SEVERITY CODE                                   00068001
                                   1072=*                                                              00069001
000AA6 41A9 7002            00002  1073=COT03   LA    R10,2(R9,R7)     GET ADDR TO BYTE BEFORE TEXT    00070001
000AAA D200 23D9 A000 00DE9 00000  1074=        MVC   WAREA+9(1),0(R10)   INSERT SEVERITY CODE         00071001
000AB0 95E6 A000      00000        1075=        CLI   0(R10),C'W'                                      00072001
000AB4 4770 20B0            00AC0  1076=        BNE   COT03A                                           00073001
000AB8 9620 D080      00080        1077=        OI    COMPFLGS,WERR    SET WARNING MESSAGE             00074001
000ABC 47F0 20C8            00AD8  1078=        B     COT04                                            00075001
                                   1079=*                                                              00076001
000AC0 95E2 A000      00000        1080=COT03A  CLI   0(R10),C'S'                                      00077001
000AC4 4770 20C4            00AD4  1081=        BNE   COT03B                                           00078001
000AC8 9610 D080      00080        1082=        OI    COMPFLGS,SERR    SET SEVERE ERROR                00079001
000ACC 9680 D080      00080        1083=        OI    COMPFLGS,COMPMODE   SET SYNTAX CHECK MODE        00080001
000AD0 47F0 20C8            00AD8  1084=        B     COT04                                            00081001
                                   1085=*                                                              00082001
000AD4 9608 D080      00080        1086=COT03B  OI    COMPFLGS,TERR    SET BIT FOR TERMINATING ERROR   00083001
                                   1087=*                                                              00084001
                                   1088=*       INSERTION OF MSG NUMBER AND SEMICOLON COUNTER          00085001
                                   1089=*                                                              00086001
000AD8 1BAA                        1090=COT04   SR    R10,R10          CLEAR REG                       00087001
000ADA 43A5 0001            00001  1091=        IC    R10,1(R5)        GET ERROR MSG NUMBER            00088001
000ADE 4EA0 23C8            00DD8  1092=        CVD   R10,WDEC+8                                       00089001
000AE2 F327 23D3 23C8 00DE3 00DD8  1093=        UNPK  WAREA+3(3),WDEC+8(8)   CONVERT TO PRINTABLE DECIMAL  00090001
000AE8 96F0 23D5      00DE5        1094=        OI    WAREA+5,X'F0'    MAKE CHAR PRINTABLE             00091001
000AEC 9180 5000      00000        1095=        TM    0(R5),X'80'      BLANKS FOR SC ?                 00092001
000AF0 4780 20F2            00B02  1096=        BZ    COT26            NO                              00093001
000AF4 D204 23DC 2534 00DEC 00F44  1097=        MVC   WAREA+12(5),BLANKS   YES, MOVE BLANKS            00094001
000AFA 947F 5000      00000        1098=        NI    0(R5),X'7F'      REMOVE TAG                      00095001
000AFE 47F0 2104            00B14  1099=        B     COT31                                            00096001
                                   1100=*                                                              00097001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

000B02 48A0 5002            00002  1101=COT26     LH    R10,2(,R5)             GET SEMICOLON COUNTER          00098001
000B06 4EA0 23C8            00DD8  1102=          CVD   R10,WDEC+8                                            00099001
000B0A F347 23DC 23C8 00DEC 00DD8  1103=          UNPK  WAREA+12(5),WDEC+8(8)  CONVERT TO READABLE DECIMAL    00100001
000B10 96F0 23E0      00DF0        1104=          OI    WAREA+16,X'F0'         MAKE CHAR PRINTABLE            00101001
                                   1105=*                                                                     00102001
                                   1106=*         INSERTION OF FIXED MESSAGE                                  00103001
                                   1107=*                                                                     00104001
000B14 41E0 23E4            00DF4  1108=COT31     LA    R14,WAREA+20           POINT TO FIRST TEXTBYTE IN WAREA 00105001
000B18 9500 7001      00001        1109=          CLI   1(R7),0                ANY INSERTION CODE ?           00106001
000B1C 4770 2126            00B36  1110=          BNE   COT05                  YES                            00107001
000B20 41A0 7003            00003  1111=          LA    R10,3(,R7)             GET ADDR OF MSG TXT            00108001
000B24 1BBB                        1112=          SR    R11,R11                                               00109001
000B26 43B0 7000            00000  1113=          IC    R11,0(,R7)             GET L'ENTRY                    00110001
000B2A 1AB7                        1114=          AR    R11,R7                 GET NEXT ENTRY                 00111001
000B2C 1BBA                        1115=          SR    R11,R10                GET L'MSG TXT                  00112001
000B2E 44B0 23AC            00DBC  1116=          EX    R11,WMOVE1             MOVE MSG TXT TO WORKAREA       00113001
000B32 41EB E001            00001  1117=          LA    R14,1(R11,R14)         UPDATE WAREA POINTER           00114001
000B36 46C0 212E            00B3E  1118=COT05     BCT   R12,COT06              GOTO INS CODE TREATMENT IF ANY 00115001
000B3A 47F0 222E            00C3E  1119=          B     COT12                  ALL INS CODES TREATED          00116001
                                   1120=*                                                                     00117001
                                   1121=*         INSERTION CODE TREATMENT                                    00118001
                                   1122=*                                                                     00119001
                                   1123=*         TEST ACTION PART OF INSERT CODE                             00120001
                                   1124=*                                                                     00121001
000B3E 4190 000F            0000F  1125=COT06     LA    R9,15                  LOAD REG TO ZERO HIGHORDER BITS 00122001
000B42 1BAA                        1126=          SR    R10,R10                                               00123001
000B44 1BBB                        1127=          SR    R11,R11                                               00124001
000B46 91F0 6000      00000        1128=          TM    0(R6),X'F0'                                           00125001
000B4A 4710 215A            00B6A  1129=          BO    COT37                  GOTO 'INSERT BLANKS'           00126001
000B4E 4780 2174            00B84  1130=          BZ    COT30                  GOTO 'INSERT MESSAGE TEXT'     00127001
000B52 9180 6000      00000        1131=          TM    0(R6),X'80'                                           00128001
000B56 4710 2190            00BA0  1132=          BO    COT07                  GOTO 'UNALTERED TEXT'          00129001
000B5A 9140 6000      00000        1133=          TM    0(R6),X'40'                                           00130001
000B5E 4710 21A6            00BB6  1134=          BO    COT10                  GOTO 'ALGOL SYMBOL'            00131001
000B62 9120 6000      00000        1135=          TM    0(R6),X'20'                                           00132001
000B66 4710 220E            00C1E  1136=          BO    COT33                  GOTO 'INTERNAL CHARACTERS'     00133001
                                   1137=*                                                                     00134001
                                   1138=*         INSERTION OF BLANKS AT END OF PRTLIN                        00135001
                                   1139=*                                                                     00136001
000B6A 4130 242A            00E3A  1140=COT37     LA    R3,WAREA+90            CALC FREE SPACE ON 1ST PRT LINE 00137001
000B6E 1B3E                        1141=          SR    R3,R14                                                00138001
000B70 47D0 2188            00B98  1142=          BNP   COT09                  BYPASS BLANKING IF LINE FULL   00139001
000B74 9240 E000      00000        1143=COT38     MVI   0(R14),C' '            INSERT BLANK                   00140001
000B78 41E0 E001            00001  1144=          LA    R14,1(,R14)            STEP WAREA POINTER             00141001
000B7C 4630 2164            00B74  1145=          BCT   R3,COT38               BRANCH IF 1ST PRT LINE NOT FULL 00142001
000B80 47F0 2188            00B98  1146=          B     COT09                  GOTO NEXT INS CODE             00143001
                                   1147=*                                                                     00144001
                                   1148=*         INSERTION OF MESSAGE TEXT PART                              00145001
                                   1149=*                                                                     00146001
000B84 43A0 6002            00002  1150=COT30     IC    R10,2(,R6)                                            00147001
000B88 41AA 7000            00000  1151=          LA    R10,0(R10,R7)          GET ADDR OF TEXT PART          00148001
000B8C 43B0 6001            00001  1152=          IC    R11,1(,R6)             GET L'TEXT PART                00149001
000B90 44B0 23AC            00DBC  1153=COT08     EX    R11,WMOVE1             MOVE TO WORKAREA               00150001
000B94 41EB E001            00001  1154=COT35     LA    R14,1(R11,R14)         UPDATE WORKAREA POINTER        00151001
000B98 4160 6003            00003  1155=COT09     LA    R6,3(,R6)              UPDATE INS CODE POINTER        00152001
000B9C 47F0 2126            00B36  1156=          B     COT05                  GOTO NEXT INS CODE             00153001
                                   1157=*                                                                     00154001
                                   1158=*         UNALTERED TEXT                                              00155001
                                   1159=*                                                                     00156001
000BA0 43B0 5000            00000  1160=COT07     IC    R11,0(,R5)             GET LENGTH OF SOURCE TEXT      00157001
000BA4 41A0 0005            00005  1161=          LA    R10,5                                                 00158001
000BA8 1BBA                        1162=          SR    R11,R10                                               00159001
000BAA 4740 2188            00B98  1163=          BM    COT09                  NO MOVE IF NO SOURCE TEXT      00160001
000BAE 41A0 5004            00004  1164=          LA    R10,4(,R5)             GET ADDR OF SOURCE TEXT        00161001
000BB2 47F0 2180            00B90  1165=          B     COT08                  MOVE TEXT, GOTO NEXT INS CODE  00162001
                                   1166=*                                                                     00163001
                                   1167=*         ALGOL SYMBOL                                                00164001
                                   1168=*                                                                     00165001
000BB6 9102 D082      00082        1169=COT10     TM    COMPFLGS+2,SET60       60 CHARACTER SET USED ?        00166001
000BBA 4710 21B6            00BC6  1170=          BO    COT32                  YES, BRANCH                    00167001
000BBE 41B0 263C            0104C  1171=          LA    R11,WORDSISO           USE ISO TABLE                  00168001
000BC2 47F0 21BA            00BCA  1172=          B     COT32A                                                00169001
                                   1173=*                                                                     00170001
000BC6 41B0 2554            00F64  1174=COT32     LA    R11,WORDSEBC           USE EBCDIC TABLE               00171001
000BCA 4130 25F6            01006  1175=COT32A    LA    R3,WSYMBSTK            TABLE FOR STACK OPERATOR       00172001
000BCE 43A0 6000            00000  1176=          IC    R10,0(,R6)             GET ONE BYTE ALGOL SYMBOL      00173001
000BD2 14A9                        1177=          NR    R10,R9                                                00174001
000BD4 43AA 5000            00000  1178=          IC    R10,0(R10,R5)                                         00175001
000BD8 42A0 23C0            00DD0  1179=          STC   R10,WDEC                                              00176001
000BDC 9180 23C0      00DD0        1180=          TM    WDEC,X'80'             SOURCE OPERATOR ?              00177001
000BE0 4780 21E0            00BF0  1181=          BZ    COT32B                 NO                             00178001
000BE4 4130 2598            00FA8  1182=          LA    R3,WSYMBSRC            YES, CHANGE TABLE              00179001
000BE8 947F 23C0      00DD0        1183=          NI    WDEC,X'7F'             REMOVE TAG                     00180001
000BEC 43A0 23C0            00DD0  1184=          IC    R10,WDEC                                              00181001
000BF0 89A0 0001            00001  1185=COT32B    SLL   R10,1                  MULTIPLY BY 2                  00182001
000BF4 48AA 3000            00000  1186=          LH    R10,0(R10,R3)          CONVERT TO EBCDIC OR DISPLACMT 00183001
000BF8 4190 0100            00100  1187=          LA    R9,256                 TEST KIND OF SYMBOL            00184001
000BFC 15A9                        1188=          CLR   R10,R9                                                00185001
000BFE 4740 2204            00C14  1189=          BL    COT11                  ONE CHARACTER SYMBOL           00186001
000C02 41AA B000            00000  1190=          LA    R10,0(R10,R11)         ADDR WORDS ENTRY               00187001
000C06 1BBB                        1191=          SR    R11,R11                                               00188001
000C08 43B0 A000            00000  1192=          IC    R11,0(,R10)            GET LENGTH OF SYMBOL           00189001
000C0C 41A0 A001            00001  1193=          LA    R10,1(,R10)            GET ADDR OF SYMBOL             00190001
000C10 47F0 2180            00B90  1194=          B     COT08                  MOVE SYMB, GOTO NEXT INS CODE  00191001
                                   1195=*                                                                     00192001
000C14 1BBB                        1196=COT11     SR    R11,R11                GET LENGTH-1 OF ONE-CHAR SYMBOL 00193001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

000C16 42A0 E000            00000  1197=          STC   R10,0(,R14)          MOVE SYMBOL TO MSG AREA         00194001
000C1A 47F0 2184            00B94  1198=          B     COT35                GOTO NEXT INS CODE              00195001
                                   1199=*                                                                    00196001
                                   1200=*         INTERNAL CHARACTERS                                        00197001
                                   1201=*                                                                    00198001
000C1E 4190 0005            00005  1202=COT33     LA    R9,5                                                 00199001
000C22 43B0 5000            00000  1203=          IC    R11,0(,R5)           GET NUMBER OF INT CHARACTERS-1  00200001
000C26 1BB9                        1204=          SR    R11,R9                                               00201001
000C28 42B0 2225            00C35  1205=          STC   R11,COT34+1          STORE IT IN TRANSLATE INSTR     00202001
000C2C 41A0 5004            00004  1206=          LA    R10,4(,R5)           GET ADDR OF SOURCE TEXT         00203001
000C30 44B0 23AC            00DBC  1207=          EX    R11,WMOVE1                                           00204001
000C34 DC00 E000 2539 00000 00F49  1208=COT34     TR    0(0,R14),TRINTEXT    TRANSLATE                       00205001
000C3A 47F0 2184            00B94  1209=          B     COT35                UPDATE PTR, GOTO NEXT INS CODE  00206001
                                   1210=*                                                                    00207001
                                   1211=*         TRANSLATION AND OUTPUT OF MESSAGE                          00208001
                                   1212=*                                                                    00209001
000C3E 9180 2522      00F32        1213=COT12     TM    SWTO,X'80'           MESSAGE TO CONSOLE ?            00210001
000C42 4710 2286            00C96  1214=          BO    COT25                YES                             00211001
                                   1215=*                                                                    00212001
                                   1216=*         MESSAGE TO SYSPRINT                                        00213001
                                   1217=*                                                                    00214001
000C46 18BE                        1218=COT16     LR    R11,R14                                              00215001
000C48 4190 23E4            00DF4  1219=          LA    R9,WAREA+20          GET L'MESSAGE TEXT              00216001
000C4C 1BB9                        1220=          SR    R11,R9                                               00217001
000C4E 4190 0046            00046  1221=          LA    R9,70                GET L'TEXT ON FIRST LINE        00218001
000C52 1BB9                        1222=          SR    R11,R9               SUBTRACT IT                     00219001
000C54 4190 0059            00059  1223=          LA    R9,89                GET L'PRINTLINE                 00220001
000C58 41A0 23D0            00DE0  1224=          LA    R10,WAREA            GET ADDR OF ERROR MESSAGE       00221001
000C5C 45F0 22E6            00CF6  1225=          BAL   R15,COT27            OBTAIN OUTPUT BUFFER, BLANK IT  00222001
000C60 12BB                        1226=          LTR   R11,R11              L'MSG TXT > 70 ?                00223001
000C62 47B0 2258            00C68  1227=          BNL   COT17                YES                             00224001
000C66 1E9B                        1228=          ALR   R9,R11               OBTAIN PRTLINE LENGTH IF < 90   00225001
000C68 4490 23B2            00DC2  1229=COT17     EX    R9,WMOVE3            MOVE FIRST PART OF ERROR MSG    00226001
000C6C 41A9 A001            00001  1230=COT20     LA    R10,1(R9,R10)        INCREASE ADDR IN WORKAREA       00227001
000C70 12BB                        1231=          LTR   R11,R11              MORE TEXT TO BE MOVED ?         00228001
000C72 47D0 22F6            00D06  1232=          BNH   COT21                NO                              00229001
000C76 4190 0046            00046  1233=          LA    R9,70                YES, GET L'NEXT PRTLINE         00230001
000C7A 1BB9                        1234=          SR    R11,R9               SUBTRACT IT FROM REMAIN TXTLGT  00231001
000C7C 45F0 22E6            00CF6  1235=          BAL   R15,COT27            OBTAIN OUTPUT BUFFER, BLANK IT  00232001
000C80 12BB                        1236=          LTR   R11,R11              LENGTH > 70 ?                   00233001
000C82 47B0 2278            00C88  1237=          BNL   COT19                YES                             00234001
000C86 1E9B                        1238=          ALR   R9,R11               OBTAIN LENGTH IF LESS THAN 70   00235001
000C88 41F0 0001            00001  1239=COT19     LA    R15,1                MODIFY LENGTH FOR MOVE INSTR    00236001
000C8C 1B9F                        1240=          SR    R9,R15                                               00237001
000C8E 4490 23B8            00DC8  1241=          EX    R9,WMOVE4            MOVE TEXT TO OUTPUT BUFFER      00238001
000C92 47F0 225C            00C6C  1242=          B     COT20                PUT OUT NEXT TEXTLINE IF ANY    00239001
                                   1243=*                                                                    00240001
                                   1244=*         MESSAGE TO WTP                                             00241001
                                   1245=*                                                                    00242001
000C96 41B0 B028            00028  1246=COT25     LA    R11,40(,R11)         GET LENGTH FOR MOVE INSTRUCTION 00243001
000C9A 44B0 22DC            00CEC  1247=          EX    R11,EXMVC                                            00244001
                                   1248=*                                                                    00245001
                                   1249=COT24     WTO   '                                                   X00246001
                                        =                    ',ROUTCDE=11,DESC=7   ISSUE WTP                 00247001
000C9E 0700                        1250+          CNOP  0,4                                                  01-WTO
000CA0 4510 22DA            00CEA  1251+COT24     BAL   1,IHB0013A                          BRANCH AROUND MESSAGE 01-WTO
000CA4 0042                        1252+          DC    AL2(66)                  TEXT LENGTH                     01-WTO
000CA6 8000                        1253+          DC    B'1000000000000000' MCS FLAGS                            01-WTO
000CA8 4040404040404040            1254+          DC    C'                                                      +01-WTO
                                        +                      '                                              01-WTO
000CE6 0200                        1255+          DC    B'0000001000000000' DESCRIPTOR CODES                     01-WTO
000CE8 0020                        1256+          DC    B'0000000000100000' ROUTING CODES                        01-WTO
000CEA                             1257+IHB0013A DS     0H                                                   01-WTO
000CEA 0A23                        1258+          SVC   35                                                   01-WTO
                                   1259=*                                                                    00248001
000CEC D200 2298 23D0 00CA8 00DE0  1260=EXMVC     MVC   COT24+8(0),WAREA     MOVE MESSAGE                    00249001
                                   1261=*                                                                    00250001
000CF2 47F0 2396            00DA6  1262=          B     WDIRET2              TERMINATE                       00251001
                                   1263=*                                                                    00252001
                                   1264=*         OBTAIN OUTPUT BUFFER                                       00253001
                                   1265=*                                                                    00254001
000CF6 90EF 2524            00F34  1266=COT27     STM   R14,R15,SVAR2        SAVE REGS FOR CALL OF PRINT RTN 00255001
000CFA 58F0 D0B8            000B8  1267=          L     R15,PRTRTADD         LOAD ADDR OF PRINT ROUTINE      00256001
000CFE 05EF                        1268=          BALR  R14,R15              CALL PRINT ROUTINE              00257001
000D00 98EF 2524            00F34  1269=          LM    R14,R15,SVAR2        RESTORE REGS                    00258001
000D04 07FF                        1270=          BR    R15                                                  00259001
                                   1271=*                                                                    00260001
                                   1272=*         GOTO NEXT MESSAGE OR TERMINATE                             00261001
                                   1273=*                                                                    00262001
000D06 1B99                        1274=COT21     SR    R9,R9                                                00263001
000D08 4390 5000            00000  1275=          IC    R9,0(,R5)            GET L'TREATED ENTRY             00264001
000D0C 1A59                        1276=          AR    R5,R9                POINT TO NEXT ENTRY             00265001
000D0E 5890 D0C0            000C0  1277=          L     R9,NEXTERR           GET ADDR OF FIRST FREE ENTRY    00266001
000D12 1959                        1278=          CR    R5,R9                NEXT ENTRY = FIRST FREE ?       00267001
000D14 4740 2056            00A66  1279=          BL    COT01                NO, HANDLE NEXT ENTRY           00268001
000D18 41A0 2396            00DA6  1280=          LA    R10,WDIRET2          LOAD NEW RETURN ADDR            00269001
000D1C 50A0 D090            00090  1281=          ST    R10,ERET                                             00270001
000D20 58A0 D0BC            000BC  1282=          L     R10,ERRPOOL          YES, POOL EXHAUSTED, ZERO PTR   00271001
000D24 50A0 D0C0            000C0  1283=          ST    R10,NEXTERR                                          00272001
000D28 9108 D080      00080        1284=          TM    COMPFLGS,TERR        TERMINATING ERROR ?             00273001
000D2C 98EF 252C            00F3C  1285=COT28     LM    R14,R15,SVAR1        LOAD RETURN ADDR AND BASE       00274001
000D30 4710 2326            00D36  1286=          BO    COT29                YES                             00275001
000D34 07FE                        1287=          BR    R14                  RETURN                          00276001
                                   1288=*                                                                    00277001
                                   1289=COT29     XCTL  EP=IEX51002          BRANCH TO TERMINATION           00278001
000D36                             1290+COT29     DS    0H                                                   01-XCTL
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000D36 0700                        1291+         CNOP  0,4                                               02-IHBIN
000D38 45F0 233C             00D4C 1292+         BAL   15,*+20            BRANCH AROUND CONSTANTS        02-IHBIN
000D3C 00000D44                    1293+         DC    A(*+8)             ADDR. OF PARM. LIST            02-IHBIN
000D40 00000000                    1294+         DC    A(0)                DCB ADDRESS PARAMETER         02-IHBIN
000D44 C9C5E7F5F1F0F0F2            1295+         DC    CL8'IEX51002'       EP PARAMETER                  02-IHBIN
000D4C 0A07                        1296+         SVC   7                              ISSUE XCTL SVC     01-XCTL
                                   1297=*                                                                00279001
                                   1298=*        ACTION TO BE PERFORMED AFTER I/O ERROR OR PROGRAM       00280001
                                   1299=*        INTERRUPTION                                            00281001
                                   1300=*                                                                00282001
000D4E 9180 D082       00082       1301=WDIRET1  TM    COMPFLGS+2,PRT          SYSPRINT ERROR ?          00283001
000D52 4780 234E             00D5E 1302=         BZ    COT18A                  NO                        00284001
000D56 9680 2522       00F32       1303=COT18    OI    SWTO,X'80'              YES, SET SWITCH ON        00285001
000D5A 47F0 239E             00DAE 1304=         B     LAST                                              00286001
                                   1305=*                                                                00287001
000D5E 9108 D081       00081       1306=COT18A   TM    COMPFLGS+1,ERR          PROGRAM INTERRUPT ?       00288001
000D62 4780 239E             00DAE 1307=         BZ    LAST                    NO                        00289001
000D66 4170 00D3             000D3 1308=         LA    R7,211                  YES, GET MESSAGE NUMBER   00290001
000D6A 48A0 2520             00F30 1309=         LH    R10,MODNUMB             MODIFY IT                 00291001
000D6E 1B7A                        1310=         SR    R7,R10                                            00292001
000D70 8970 0002             00002 1311=         SLL   R7,2                    GET ENTRY IN ADDR TABLE   00293001
000D74 5890 251C             00F2C 1312=         L     R9,AWADDTAB                                       00294001
000D78 1A79                        1313=         AR    R7,R9                   GET ADDR OF MESSAGE       00295001
000D7A 5870 7000             00000 1314=         L     R7,0(,R7)                                         00296001
000D7E 45F0 22E6             00CF6 1315=         BAL   R15,COT27               GET PRINT BUFFER          00297001
000D82 D213 1000 2504 00000 00F14  1316=         MVC   0(20,R1),CPI            MOVE MSG CODE ETC         00298001
000D88 D232 1014 7000 00014 00000  1317=         MVC   20(51,R1),0(R7)         MOVE MSG TEXT             00299001
000D8E 45F0 22E6             00CF6 1318=         BAL   R15,COT27               GET PRINT BUFFER          00300001
000D92 5890 D0C0             000C0 1319=         L     R9,NEXTERR              GET ADDR OF PSW           00301001
000D96 41A0 0010             00010 1320=         LA    R10,16                                            00302001
000D9A 1B9A                        1321=         SR    R9,R10                                            00303001
000D9C D20F 1014 9000 00014 00000  1322=         MVC   20(16,R1),0(R9)         MOVE PSW                  00304001
000DA2 924B 1025       00025       1323=         MVI   37(R1),C'.'             INSERT PERIOD             00305001
                                   1324=*                                                                00306001
000DA6 9680 D081       00081       1325=WDIRET2  OI    COMPFLGS+1,NSRCE        SET BIT FOR TERMINATING ERROR 00307001
000DAA 47F0 2326             00D36 1326=         B     COT29                   BRANCH TO TERMINATION     00308001
                                   1327=*                                                                00309001
                                   1328=*        HANDLE LAST ERROR PATTERN                               00310001
                                   1329=*                                                                00311001
000DAE 5850 D0C0             000C0 1330=LAST     L     R5,NEXTERR              GET ADDR OF FIRST FREE ENTRY  00312001
000DB2 41A0 000C             0000C 1331=         LA    R10,12                  GET ADDR OF LAST PATTERN  00313001
000DB6 1B5A                        1332=         SR    R5,R10                                            00314001
000DB8 47F0 2056             00A66 1333=         B     COT01                   GOTO NORMAL TREATMENT     00315001
                                   1334=*                                                                00316001
                                   1335=*        WORKAREAS AND MOVE INSTRUCTIONS                         00317001
                                   1336=*                                                                00318001
000DBC                             1337=         CNOP  0,4                                               00319001
000DBC D200 E000 A000 00000 00000  1338=WMOVE1   MVC   0(0,R14),0(R10)                                   00320001
000DC2 D200 1000 A000 00000 00000  1339=WMOVE3   MVC   0(0,R1),0(R10)                                    00321001
000DC8 D200 1014 A000 00014 00000  1340=WMOVE4   MVC   20(0,R1),0(R10)                                   00322001
                                   1341=*                                                                00323001
000DCE 0000
000DD0 0000000000000000            1342=WDEC     DC    2D'0'                                             00324001
000DE0 C9C5E7F0F0F0C940            1343=WAREA    DC    C'IEX000I  0  00000   '                           00325001
000DF4 4040404040404040            1344=         DC    250C' '                                           00326001
                                   1345=*                                                                00327001
                                   1346=*        HEADINGS AND MESSAGE 211 (PART OF)                      00328001
                                   1347=*                                                                00329001
000EEE C4C9C1C7D5D6E2E3            1348=HEADD1   DC    C'DIAGNOSTICS'                                    00330001
000EF9 C3D6C4C540404040            1349=HEADD2   DC    C'CODE     SEV  SC      MESSAGE'                   00331001
                                   1350=*                                                                00332001
000F14 C9C5E7F2F1F1C940            1351=CPI      DC    C'IEX211I   T          ' FIRST PART OF MESSAGE 211  00333001
                                   1352=*                                                                00334001
                                   1353=*        ADDRESSES AND CONSTANT                                  00335001
                                   1354=*                                                                00336001
000F28 00000000                    1355=AWEMPOOL DC    F'0'                    ADDR OF MESSAGE TEXTS     00337001
000F2C 00000000                    1356=AWADDTAB DC    F'0'                    ADDR OF ADDR TABLE        00338001
000F30 0000                        1357=MODNUMB  DC    H'0'                    MODIFICATION NUMBER       00339001
                                   1358=*                                                                00340001
                                   1359=*        VARIOUS                                                 00341001
                                   1360=*                                                                00342001
000F32 00                          1361=SWTO     DC    X'00'                   SWITCH FOR OUTPUT ON CONSOLE  00343001
000F33 00
000F34 0000000000000000            1362=SVAR2    DC    2F'0'                   TO SAVE LINKREGS FOR PRINT RTN  00344001
000F3C 0000000000000000            1363=SVAR1    DC    2F'0'                   TO SAVE RETURN ADDR AND BASE  00345001
000F44 4040404040                  1364=BLANKS   DC    CL5' '                                            00346001
                                   1365=*                                                                00347001
                                   1366=*        TABLES FOR CONVERSION AND TRANSLATION                   00348001
                                   1367=*                                                                00349001
                                   1368=*        TRANSLATE INTERNAL CHARS TO EBCDIC                      00350001
                                   1369=*                                                                00351001
000F49 4E605C617B7B4D7A            1370=TRINTEXT DC    C'+-*/##(:'             00 -> 07                  00352001
000F51 AD7B7B5E7B7B7B7B            1371=         DC    C'[##;####'             08 -> 0F                  00353001
000F59 7E4C6E7B7B7B7B7B            1372=         DC    C'=<>#####'             10 -> 17                  00354001
000F61 7B7B7B7B7B7B7B7B            1373=         DC    C'########'             18 -> 1F                  00355001
000F69 5F7B4F507B6B5D7A            1374=         DC    C'¬#|&&#,):'            20 -> 27                  00356001
000F71 BD7B7B407B4B7D7B            1375=         DC    C']## #.''#'            28 -> 2F                  00357001
000F79 F0F1F2F3F4F5F6F7            1376=         DC    C'01234567'             30 -> 37                  00358001
000F81 F8F97B7B7B7B4B7D            1377=         DC    C'89####.'''            38 -> 3F                  00359001
000F89 C1C2C3C4C5C6C7C8            1378=         DC    C'ABCDEFGH'             40 -> 47                  00360001
000F91 C9D1D2D3D4D5D6D7            1379=         DC    C'IJKLMNOP'             48 -> 4F                  00361001
000F99 D8D9E2E3E4E5E6E7            1380=         DC    C'QRSTUVWX'             50 -> 57                  00362001
000FA1 E8E95B6D7B7C                1381=         DC    C'YZ$_#@'               58 -> 5D                  00363001
                                   1382=*                                                                00364001
                                   1383=*                                                                00365001
                                   1384=*        CONVERSION OF SOURCE OPERATORS                          00366001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   1385=*                                                                       00367001
000FA7 00
000FA8                             1386=          DC    0F'0'                                                   00368001
000FA8 00                          1387=WSYMBSRC  DC    X'00'                  00        PLUS                   00369001
000FA9 4E                          1388=          DC    C'+'                                                    00370001
000FAA 00                          1389=          DC    X'00'                  01        MINUS                  00371001
000FAB 60                          1390=          DC    C'-'                                                    00372001
000FAC 00                          1391=          DC    X'00'                  02        MULTIPLY               00373001
000FAD 5C                          1392=          DC    C'*'                                                    00374001
000FAE 00                          1393=          DC    X'00'                  03        DIVIDE                 00375001
000FAF 61                          1394=          DC    C'/'                                                    00376001
000FB0 0100                        1395=          DC    H'256'                 04        INTEGER DIVIDE         00377001
000FB2 0104                        1396=          DC    H'260'                 05        'POWER'                00378001
000FB4 00                          1397=          DC    X'00'                  06        LEFT PARENTHESIS       00379001
000FB5 4D                          1398=          DC    C'('                                                    00380001
000FB6 010C                        1399=          DC    H'268'                 07        COLON                  00381001
000FB8 010F                        1400=          DC    H'271'                 08        LEFT BRACKET           00382001
000FBA 0112                        1401=          DC    H'274'                 09        'ARRAY'                00383001
000FBC 011A                        1402=          DC    H'282'                 0A        'SWITCH'               00384001
000FBE 0123                        1403=          DC    H'291'                 0B        SEMICOLON              00385001
000FC0 0126                        1404=          DC    H'294'                 0C        'BEGIN'                00386001
000FC2 0126                        1405=          DC    H'294'                 0D        'BEGIN'                00387001
000FC4 01D5                        1406=          DC    H'469'                 0E        'PROCEDURE'            00388001
000FC6 01D5                        1407=          DC    H'469'                 0F        'PROCEDURE'            00389001
000FC8 012E                        1408=          DC    H'302'                 10        'EQUAL'                00390001
000FCA 0136                        1409=          DC    H'310'                 11        'LESS'                 00391001
000FCC 013D                        1410=          DC    H'317'                 12        'GREATER'              00392001
000FCE 0147                        1411=          DC    H'327'                 13        'NOTEQUAL'             00393001
000FD0 0152                        1412=          DC    H'338'                 14        'NOTGREATER            00394001
000FD2 015F                        1413=          DC    H'351'                 15        'NOTLESS'              00395001
000FD4 0169                        1414=          DC    H'361'                 16        COLON EQUAL            00396001
000FD6 016C                        1415=          DC    H'364'                 17        'GOTO'                 00397001
000FD8 0173                        1416=          DC    H'371'                 18        'FOR'                  00398001
000FDA 0179                        1417=          DC    H'377'                 19        'STEP'                 00399001
000FDC 0180                        1418=          DC    H'384'                 1A        'UNTIL'                00400001
000FDE 0188                        1419=          DC    H'392'                 1B        'WHILE'                00401001
000FE0 0190                        1420=          DC    H'400'                 1C        'DO'                   00402001
000FE2 0195                        1421=          DC    H'405'                 1D        'IF'                   00403001
000FE4 019A                        1422=          DC    H'410'                 1E        'THEN'                 00404001
000FE6 01A1                        1423=          DC    H'417'                 1F        'ELSE'                 00405001
000FE8 01A8                        1424=          DC    H'424'                 20        'NOT'                  00406001
000FEA 01AE                        1425=          DC    H'430'                 21        'IMPL'                 00407001
000FEC 01B5                        1426=          DC    H'437'                 22        'OR'                   00408001
000FEE 01BA                        1427=          DC    H'442'                 23        'AND'                  00409001
000FF0 01C0                        1428=          DC    H'448'                 24        'EQUIV'                00410001
000FF2 00                          1429=          DC    X'00'                  25        COMMA                  00411001
000FF3 6B                          1430=          DC    C','                                                    00412001
000FF4 00                          1431=          DC    X'00'                  26        RIGHT PARENTHESIS      00413001
000FF5 5D                          1432=          DC    C')'                                                    00414001
000FF6 010C                        1433=          DC    H'268'                 27        COLON                  00415001
000FF8 01C8                        1434=          DC    H'456'                 28        RIGHT SUBSCRIPT BRACK  00416001
000FFA 0123                        1435=          DC    H'291'                 29        DELTA                  00417001
000FFC 01CB                        1436=          DC    H'459'                 2A        'END'                  00418001
000FFE 0123                        1437=          DC    H'291'                 2B        ETA                    00419001
001000 01CB                        1438=          DC    H'459'                 2C        'END'                  00420001
001002 00                          1439=          DC    X'00'                  2D        OMEGA                  00421001
001003 40                          1440=          DC    C' '                                                    00422001
001004 01E1                        1441=          DC    H'481'                 2E        'CODE'                 00423001
                                   1442=*                                                                       00424001
                                   1443=*         CONVERSION OF STACK OPERATORS                                 00425001
                                   1444=*                                                                       00426001
001006 00                          1445=WSYMBSTK  DC    X'00'                  00        PLUS                   00427001
001007 4E                          1446=          DC    C'+'                                                    00428001
001008 00                          1447=          DC    X'00'                  01        MINUS                  00429001
001009 60                          1448=          DC    C'-'                                                    00430001
00100A 00                          1449=          DC    X'00'                  02        MULTIPLY               00431001
00100B 5C                          1450=          DC    C'*'                                                    00432001
00100C 00                          1451=          DC    X'00'                  03        DIVIDE                 00433001
00100D 61                          1452=          DC    C'/'                                                    00434001
00100E 0100                        1453=          DC    H'256'                 04        INTEGER DIVIDE         00435001
001010 0104                        1454=          DC    H'260'                 05        'POWER'                00436001
001012 00                          1455=          DC    X'00'                  06        LEFT PARENTHESIS       00437001
001013 4D                          1456=          DC    C'('                                                    00438001
001014 010C                        1457=          DC    H'268'                 07        COLON                  00439001
001016 010F                        1458=          DC    H'271'                 08        LEFT BRACKET           00440001
001018 0112                        1459=          DC    H'274'                 09        'ARRAY'                00441001
00101A 011A                        1460=          DC    H'282'                 0A        'SWITCH'               00442001
00101C 0123                        1461=          DC    H'291'                 0B        SEMICOLON              00443001
00101E 0126                        1462=          DC    H'294'                 0C        'BEGIN'                00444001
001020 0126                        1463=          DC    H'294'                 0D        'BEGIN'                00445001
001022 01D5                        1464=          DC    H'469'                 0E        'PROCEDURE'            00446001
001024 01D5                        1465=          DC    H'469'                 0F        'PROCEDURE'            00447001
001026 012E                        1466=          DC    H'302'                 10        'EQUAL'                00448001
001028 0136                        1467=          DC    H'310'                 11        'LESS'                 00449001
00102A 013D                        1468=          DC    H'317'                 12        'GREATER'              00450001
00102C 0147                        1469=          DC    H'327'                 13        'NOTEQUAL'             00451001
00102E 0152                        1470=          DC    H'338'                 14        'NOTGREATER            00452001
001030 015F                        1471=          DC    H'351'                 15        'NOTLESS'              00453001
001032 0169                        1472=          DC    H'361'                 16        COLON EQUAL            00454001
001034 016C                        1473=          DC    H'364'                 17        'GOTO'                 00455001
001036 0173                        1474=          DC    H'371'                 18        'FOR'                  00456001
001038 0179                        1475=          DC    H'377'                 19        'STEP'                 00457001
00103A 0180                        1476=          DC    H'384'                 1A        'UNTIL'                00458001
00103C 0188                        1477=          DC    H'392'                 1B        'WHILE'                00459001
00103E 0190                        1478=          DC    H'400'                 1C        'DO'                   00460001
001040 0195                        1479=          DC    H'405'                 1D        'IF'                   00461001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

001042 019A                        1480=          DC    H'410'          1E        'THEN'              00462001
001044 01A1                        1481=          DC    H'417'          1F        'ELSE'              00463001
001046 01A8                        1482=          DC    H'424'          20        'NOT'               00464001
001048 01AE                        1483=          DC    H'430'          21        'IMPL'              00465001
00104A 01B5                        1484=          DC    H'437'          22        'OR'                00466001
00104C 01BA                        1485=          DC    H'442'          23        'AND'               00467001
00104E 01C0                        1486=          DC    H'448'          24        'EQUIV'             00468001
001050 00                          1487=          DC    X'00'           25        ALPHA               00469001
001051 40                          1488=          DC    C' '                                          00470001
001052 0195                        1489=          DC    H'405'          26        IFS                 00471001
001054 019A                        1490=          DC    H'410'          27        THENS               00472001
001056 01A1                        1491=          DC    H'417'          28        ELSES               00473001
001058 00                          1492=          DC    X'00'           29        LEFT PARENTHESIS    00474001
001059 4D                          1493=          DC    C'('                                          00475001
00105A 00                          1494=          DC    X'00'           2A        LEFT PARENTHESIS    00476001
00105B 4D                          1495=          DC    C'('                                          00477001
00105C 00                          1496=          DC    X'00'           2B        MONADIC MINUS       00478001
00105D 60                          1497=          DC    C'-'                                          00479001
00105E 010F                        1498=          DC    H'271'          2C        LEFT SUBSCRIPT BRACKET 00480001
001060 0169                        1499=          DC    H'361'          2D        COLON EQUAL         00481001
001062 0169                        1500=          DC    H'361'          2E        COLON EQUAL         00482001
                                   1501=*                                                             00483001
                                   1502=*         COMPOUND ALGOL SYMBOLS, EBCDIC                      00484001
                                   1503=*                                                             00485001
001064                             1504=          DC    0F'0'                                         00486001
                      00F64        1505=WORDSEBC  EQU   *-256                                         00487001
001064 02                          1506=          DC    X'02'           256       INTEGER DIVIDE      00488001
001065 7D617D                      1507=          DC    C'''/'''                                      00489001
001068 01                          1508=          DC    X'01'           260       POWER               00490001
001069 5C5C4040404040              1509=          DC    C'**     '                                    00491001
001070 00                          1510=          DC    X'00'           268       COLON               00492001
001071 7A40                        1511=          DC    C': '                                         00493001
001073 01                          1512=          DC    X'01'           271       LEFT BRACKET        00494001
001074 4D61                        1513=          DC    C'(/'                                         00495001
001076 06                          1514=          DC    X'06'           274       'ARRAY'             00496001
001077 7DC1D9D9C1E87D              1515=          DC    C'''ARRAY'''                                  00497001
00107E 07                          1516=          DC    X'07'           282       'SWITCH'            00498001
00107F 7DE2E6C9E3C3C87D            1517=          DC    C'''SWITCH'''                                 00499001
001087 00                          1518=          DC    X'00'           291       SEMICOLON           00500001
001088 5E40                        1519=          DC    C'; '                                         00501001
00108A 06                          1520=          DC    X'06'           294       'BEGIN'             00502001
00108B 7DC2C5C7C9D57D              1521=          DC    C'''BEGIN'''                                  00503001
001092 00                          1522=          DC    X'00'           302       EQUAL               00504001
001093 7E404040404040              1523=          DC    C'=      '                                    00505001
00109A 00                          1524=          DC    X'00'           310       LESSTHAN            00506001
00109B 4C4040404040                1525=          DC    C'<     '                                     00507001
0010A1 00                          1526=          DC    X'00'           317       GREATER THAN        00508001
0010A2 6E40404040404040            1527=          DC    C'>       '                                   00509001
0010AB 01                          1528=          DC    X'01'           327       NOT EQUAL           00510001
0010AC 5F7E404040404040            1529=          DC    C'¬=      '                                   00511001
0010B6 01                          1530=          DC    X'01'           338       LESS THAN OR EQU    00512001
0010B7 4C7E404040404040            1531=          DC    C'<=         '                                00513001
0010C3 01                          1532=          DC    X'01'           351       GR THAN OR EQU      00514001
0010C4 6E7E404040404040            1533=          DC    C'>=      '                                   00515001
0010CD 01                          1534=          DC    X'01'           361       COLON EQUAL         00516001
0010CE 7A7E                        1535=          DC    C':='                                         00517001
0010D0 05                          1536=          DC    X'05'           364       'GOTO'              00518001
0010D1 7DC7D6E3D67D                1537=          DC    C'''GOTO'''                                   00519001
0010D7 04                          1538=          DC    X'04'           371       'FOR'               00520001
0010D8 7DC6D6D97D                  1539=          DC    C'''FOR'''                                    00521001
0010DD 03                          1540=          DC    X'03'           377       'STEP'              00522001
0010DE 7DE2E3C5D77D                1541=          DC    C'''STEP'''                                   00523001
0010E4 06                          1542=          DC    X'06'           384       'UNTIL'             00524001
0010E5 7DE4D5E3C9D37D              1543=          DC    C'''UNTIL'''                                  00525001
0010EC 06                          1544=          DC    X'06'           392       'WHILE'             00526001
0010ED 7DE6C8C9D3C57D              1545=          DC    C'''WHILE'''                                  00527001
0010F4 03                          1546=          DC    X'03'           400       'DO'                00528001
0010F5 7DC4D67D                    1547=          DC    C'''DO'''                                     00529001
0010F9 03                          1548=          DC    X'03'           405       'IF'                00530001
0010FA 7DC9C67D                    1549=          DC    C'''IF'''                                     00531001
0010FE 05                          1550=          DC    X'05'           410       'THEN'              00532001
0010FF 7DE3C8C5D57D                1551=          DC    C'''THEN'''                                   00533001
001105 05                          1552=          DC    X'05'           417       'ELSE'              00534001
001106 7DC5D3E2C57D                1553=          DC    C'''ELSE'''                                   00535001
00110C 00                          1554=          DC    X'00'           424       NOT                 00536001
00110D 5F40404040                  1555=          DC    C'¬    '                                      00537001
001112 05                          1556=          DC    X'05'           430       'IMPL'              00538001
001113 7DC9D4D7D37D                1557=          DC    C'''IMPL'''                                   00539001
001119 00                          1558=          DC    X'00'           437       OR                  00540001
00111A 4F404040                    1559=          DC    C'|   '                                       00541001
00111E 00                          1560=          DC    X'00'           442       AND                 00542001
00111F 5040404040                  1561=          DC    C'&&    '                                     00543001
001124 06                          1562=          DC    X'06'           448       'EQUIV'             00544001
001125 7DC5D8E4C9E57D              1563=          DC    C'''EQUIV'''                                  00545001
00112C 01                          1564=          DC    X'01'           456       RIGHT BRACKET       00546001
00112D 615D                        1565=          DC    C'/)'                                         00547001
00112F 04                          1566=          DC    X'04'           459       'END'               00548001
001130 7DC5D5C47D                  1567=          DC    C'''END'''                                    00549001
001135 02                          1568=          DC    X'02'           465       LEFT STRINGQUOTE    00550001
001136 7D4D7D                      1569=          DC    C'''('''                                      00551001
001139 0A                          1570=          DC    X'0A'           469       'PROCEDURE'         00552001
00113A 7DD7D9D6C3C5C4E4            1571=          DC    C'''PROCEDURE'''                              00553001
001145 05                          1572=          DC    X'05'           481       'CODE'              00554001
001146 7DC3D6C4C57D                1573=          DC    C'''CODE'''                                   00555001
                                   1574=*                                                             00556001
00114C                             1575=          DS    0F                                            00557001
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  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                      0104C        1576=WORDSISO EQU   *-256           LIST OF COMPOUND ALGOL SYMBOLS, ISO  00558001
00114C 02                          1577=         DC    X'02'               256       INTEGER DIVIDE         00559001
00114D 7D617D                      1578=         DC    C'''/'''                                             00560001
001150 06                          1579=         DC    X'06'               260       'POWER'                00561001
001151 7DD7D6E6C5D97D              1580=         DC    C'''POWER'''                                         00562001
001158 01                          1581=         DC    X'01'               268       COLON                  00563001
001159 4B4B                        1582=         DC    C'..'                                                00564001
00115B 01                          1583=         DC    X'01'               271       LEFT BRACKET           00565001
00115C 4D61                        1584=         DC    C'(/'                                                00566001
00115E 06                          1585=         DC    X'06'               274       'ARRAY'                00567001
00115F 7DC1D9D9C1E87D              1586=         DC    C'''ARRAY'''                                         00568001
001166 07                          1587=         DC    X'07'               282       'SWITCH'               00569001
001167 7DE2E6C9E3C3C87D            1588=         DC    C'''SWITCH'''                                        00570001
00116F 01                          1589=         DC    X'01'               291       SEMICOLON              00571001
001170 4B6B                        1590=         DC    C'.,'                                                00572001
001172 06                          1591=         DC    X'06'               294       'BEGIN'                00573001
001173 7DC2C5C7C9D57D              1592=         DC    C'''BEGIN'''                                         00574001
00117A 06                          1593=         DC    X'06'               302       'EQUAL'                00575001
00117B 7DC5D8E4C1D37D              1594=         DC    C'''EQUAL'''                                         00576001
001182 05                          1595=         DC    X'05'               310       'LESS'                 00577001
001183 7DD3C5E2E27D                1596=         DC    C'''LESS'''                                          00578001
001189 08                          1597=         DC    X'08'               317       'GREATER'              00579001
00118A 7DC7D9C5C1E3C5D9            1598=         DC    C'''GREATER'''                                       00580001
001193 09                          1599=         DC    X'09'               327       'NOTEQUAL'             00581001
001194 7DD5D6E3C5D8E4C1            1600=         DC    C'''NOTEQUAL'''                                      00582001
00119E 0B                          1601=         DC    X'0B'               338       'NOTGREATER'           00583001
00119F 7DD5D6E3C7D9C5C1            1602=         DC    C'''NOTGREATER'''                                    00584001
0011AB 08                          1603=         DC    X'08'               351       'NOTLESS'              00585001
0011AC 7DD5D6E3D3C5E2E2            1604=         DC    C'''NOTLESS'''                                       00586001
0011B5 01                          1605=         DC    X'01'               361       COLON EQUAL            00587001
0011B6 4B7E                        1606=         DC    C'.='                                                00588001
0011B8 05                          1607=         DC    X'05'               364       'GOTO'                 00589001
0011B9 7DC7D6E3D67D                1608=         DC    C'''GOTO'''                                          00590001
0011BF 04                          1609=         DC    X'04'               371       'FOR'                  00591001
0011C0 7DC6D6D97D                  1610=         DC    C'''FOR'''                                           00592001
0011C5 03                          1611=         DC    X'03'               377       'STEP'                 00593001
0011C6 7DE2E3C5D77D                1612=         DC    C'''STEP'''                                          00594001
0011CC 06                          1613=         DC    X'06'               384       'UNTIL'                00595001
0011CD 7DE4D5E3C9D37D              1614=         DC    C'''UNTIL'''                                         00596001
0011D4 06                          1615=         DC    X'06'               392       'WHILE'                00597001
0011D5 7DE6C8C9D3C57D              1616=         DC    C'''WHILE'''                                         00598001
0011DC 03                          1617=         DC    X'03'               400       'DO'                   00599001
0011DD 7DC4D67D                    1618=         DC    C'''DO'''                                            00600001
0011E1 03                          1619=         DC    X'03'               405       'IF'                   00601001
0011E2 7DC9C67D                    1620=         DC    C'''IF'''                                            00602001
0011E6 05                          1621=         DC    X'05'               410       'THEN'                 00603001
0011E7 7DE3C8C5D57D                1622=         DC    C'''THEN'''                                          00604001
0011ED 05                          1623=         DC    X'05'               417       'ELSE'                 00605001
0011EE 7DC5D3E2C57D                1624=         DC    C'''ELSE'''                                          00606001
0011F4 04                          1625=         DC    X'04'               424       'NOT'                  00607001
0011F5 7DD5D6E37D                  1626=         DC    C'''NOT'''                                           00608001
0011FA 05                          1627=         DC    X'05'               430       'IMPL'                 00609001
0011FB 7DC9D4D7D37D                1628=         DC    C'''IMPL'''                                          00610001
001201 03                          1629=         DC    X'03'               437       'OR'                   00611001
001202 7DD6D97D                    1630=         DC    C'''OR'''                                            00612001
001206 04                          1631=         DC    X'04'               442       'AND'                  00613001
001207 7DC1D5C47D                  1632=         DC    C'''AND'''                                           00614001
00120C 06                          1633=         DC    X'06'               448       'EQUIV'                00615001
00120D 7DC5D8E4C9E57D              1634=         DC    C'''EQUIV'''                                         00616001
001214 01                          1635=         DC    X'01'               456       RIGHT BRACKET          00617001
001215 615D                        1636=         DC    C'/)'                                                00618001
001217 04                          1637=         DC    X'04'               459       'END'                  00619001
001218 7DC5D5C47D                  1638=         DC    C'''END'''                                           00620001
00121D 02                          1639=         DC    X'02'               465       LEFT STRINGQUOTE       00621001
00121E 7D4D7D                      1640=         DC    C'''('''                                             00622001
001221 0A                          1641=         DC    X'0A'               469       'PROCEDURE'            00623001
001222 7DD7D9D6C3C5C4E4            1642=         DC    C'''PROCEDURE'''                                     00624001
00122D 05                          1643=         DC    X'05'               481       'CODE'                 00625001
00122E 7DC3D6C4C57D                1644=         DC    C'''CODE'''                                          00626001
                                   1645=*                                                                   00627001
                                   1646=*        END OF IEX60000                                            00628001
                                   1647=*                                                                   00629001
                                   1648 *                                                                   00938001
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  Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                     1650 *                                                                  00940001
001238                  01238 00160  1651 IEX51002 CSECT                                                     00941001
                                     1652 *                                                                  00942001
001238 0520                          1653          BALR  R2,0                                                00943001
                 R:2  0123A          1654          USING *,R2                                                00944001
                                     1655 *                                                                  00945001
00123A 9604 D081        00081        1656          OI    COMPFLGS+1,TERM       INDICATE THIS ROUTINE IS ENTERED 00946001
00123E 4100 2026              01260  1657          LA    R0,CLOSEDCB           PROVIDE DIRECTORY             00947001
001242 5000 D090              00090  1658          ST    R0,ERET               RETURN ADDR                   00948001
                                     1659 *                                                                  00949001
                                     1660 *        FREE THE STORAGE OF THE ERROR POOL AND SOURCE PROG        00950001
                                     1661 *        BUFFER 1                                                  00951001
                                     1662 *                                                                  00952001
001246 9102 D081        00081        1663          TM    COMPFLGS+1,NOBUF      GETMAIN FOR BUFFERS ISSUED ?  00953001
00124A 4710 2026              01260  1664          BO    CLOSEDCB              NO, BRANCH                    00954001
00124E 5800 D0DC              000DC  1665          L     R0,POOLS              SIZE OF ERROR POOL            00955001
001252 5A00 D0E0              000E0  1666          A     R0,SRCE1S             SIZE OF SOURCE PROG BUFFER 1  00956001
001256 5810 D0BC              000BC  1667          L     R1,ERRPOOL            ADDR OF ERROR POOL            00957001
                                     1668 *                                                                  00958001
                                     1669          FREEMAIN R,LV=(0),A=(1)                                   00959001
                                     1670+*        OS/VS2 RELEASE 3 VERSION  -- 10/25/74                     01-FREEM
00125A 4110 1000              00000  1671+         LA    1,0(0,1)                        CLEAR HI ORDER BYTE 01-FREEM
00125E 0A0A                          1672+         SVC   10                              ISSUE FREEMAIN SVC  01-FREEM
                                     1673 *                                                                  00960001
                                     1674 *        CLOSE THE DCBS AND FREE THE BUFFER POOLS                  00961001
                                     1675 *                                                                  00962001
001260 0520                          1676 CLOSEDCB BALR  R2,0                                                00963001
                 R:2  01262          1677          USING *,R2                                                00964001
001262 4100 20F0              01352  1678          LA    R0,SPIE               PROVIDE NEW DIR RETURN ADDR   00965001
001266 5000 D090              00090  1679          ST    R0,ERET                                             00966001
00126A 983C D048              00048  1680          LM    R3,R12,DCBTABLE       LOAD DCB ADDRS                00967001
                 R:8  00000          1681          USING IHADCB,R8             R8 -> SYSPRINT DCB            00968001
00126E 9110 8030        00030        1682          TM    DCBOFLGS,DCBOFOPN     SYSPRINT OPEN ?               00969001
                                     1683          DROP  R8                                                  00970001
001272 4710 201A              0127C  1684          BO    CLOSEB                YES, BRANCH                   00971001
001276 96F0 20BF        01321        1685          OI    SWITCH+1,X'F0'                                      00972001
                                     1686 *                                                                  00973001
                                     1687 CLOSEB   CLOSE ((3),,(8),,(9),,(11),,(12))                         00974001
00127A 0700                          1688+         CNOP  0,4                             ALIGN LIST TO FULLWORD 01-CLOSE
00127C 4510 2032              01294  1689+CLOSEB   BAL   1,*+24                          LOAD REG1 W/LIST ADDR 01-CLOSE
001280 00000000                      1690+         DC    A(0)                            OPTION AND DCB ADDRESS 01-CLOSE
001284 00000000                      1691+         DC    A(0)                            OPTION AND DCB ADDRESS 01-CLOSE
001288 00000000                      1692+         DC    A(0)                            OPTION AND DCB ADDRESS 01-CLOSE
00128C 00000000                      1693+         DC    A(0)                            OPTION AND DCB ADDRESS 01-CLOSE
001290 00000000                      1694+         DC    A(0)                            OPTION AND DCB ADDRESS 01-CLOSE
001294 5031 0000              00000  1695+         ST    3,0(1,0)                        STORE DCB ADDRESS   01-CLOSE
001298 5081 0004              00004  1696+         ST    8,4(1,0)                        STORE DCB ADDRESS   01-CLOSE
00129C 5091 0008              00008  1697+         ST    9,8(1,0)                        STORE DCB ADDRESS   01-CLOSE
0012A0 50B1 000C              0000C  1698+         ST    11,12(1,0)                      STORE DCB ADDRESS   01-CLOSE
0012A4 50C1 0010              00010  1699+         ST    12,16(1,0)                      STORE DCB ADDRESS   01-CLOSE
0012A8 9280 1010        00010        1700+         MVI   16(1),128                       MOVE IN OPTION BYTE 01-CLOSE
0012AC 0A14                          1701+         SVC   20                              ISSUE CLOSE SVC     01-CLOSE
                                     1702 *                                                                  00975001
0012AE 9140 D081        00081        1703          TM    COMPFLGS+1,NLOAD                                    00976001
0012B2 4710 2084              012E6  1704          BO    FRPPCH                IF NOLOAD OPTION              00977001
0012B6 1813                          1705          LR    R1,R3                 R1 -> SYSLIN DCB              00978001
                                     1706 *                                                                  00979001
                                     1707          FREEPOOL (1)                FREE SYSLIN BUFFERS           00980001
0012B8 58F0 1014              00014  1708+         L     15,20(0,1)            LOAD BUFCB ADDRESS            01-FREEP
0012BC 9601 1017        00017        1709+         OI    23(1),1               INDICATE NO BUFCB ADDR        01-FREEP
0012C0 1BEE                          1710+         SR    14,14                 CLEAR REGISTER                01-FREEP
0012C2 1B11                          1711+         SR    1,1                   CLEAR REGISTER         @ZA79785 01-FREEP
0012C4 BF13 F006              00006  1712+         ICM   1,3,6(15)             LOAD LENGTH OF BUFFERS @ZA86199 01-FREEP
0012C8 43E0 F005              00005  1713+         IC    14,5(0,15)            NUMBER OF BUFFERS      @ZA79785 01-FREEP
0012CC 1C0E                          1714+         MR    0,14                  AREA TO BE FREED       @ZA79785 01-FREEP
0012CE 4110 1008              00008  1715+         LA    1,8(0,1)              ACCOUNT FOR BCB        @ZA86199 01-FREEP
0012D2 9140 F004        00004        1716+         TM    4(15),X'40'           IS BUFCB 16 BYTES       @ZA19719 01-FREEP
0012D6 47E0 207C              012DE  1717+         BNO   *+8                   BRANCH IF BUFCB = 8 BYTES     01-FREEP
0012DA 4110 1008              00008  1718+         LA    1,8(0,1)              ADJUST SIZE PLUS 8      @ZA87508 01-FREEP
0012DE 1801                          1719+         LR    0,1                   LOAD LENGTH TO BE FREED @ZA86199 01-FREEP
0012E0 4110 F000              00000  1720+         LA    1,0(0,15)             LOAD AREA ADDRESS             01-FREEP
0012E4 0A0A                          1721+         SVC   10                    ISSUE FREEMAIN SVC            01-FREEP
                                     1722 *                                                                  00981001
0012E6 9120 D081        00081        1723 FRPPCH   TM    COMPFLGS+1,NDECK                                    00982001
0012EA 4710 20BC              0131E  1724          BO    FRPPRT                IF NODECK OPTION              00983001
0012EE 1819                          1725          LR    R1,R9                 R1 -> SYSPUNCH DCB            00984001
                                     1726 *                                                                  00985001
                                     1727          FREEPOOL (1)                FREE SYSPUNCH BUFFERS         00986001
0012F0 58F0 1014              00014  1728+         L     15,20(0,1)            LOAD BUFCB ADDRESS            01-FREEP
0012F4 9601 1017        00017        1729+         OI    23(1),1               INDICATE NO BUFCB ADDR        01-FREEP
0012F8 1BEE                          1730+         SR    14,14                 CLEAR REGISTER                01-FREEP
0012FA 1B11                          1731+         SR    1,1                   CLEAR REGISTER         @ZA79785 01-FREEP
0012FC BF13 F006              00006  1732+         ICM   1,3,6(15)             LOAD LENGTH OF BUFFERS @ZA86199 01-FREEP
001300 43E0 F005              00005  1733+         IC    14,5(0,15)            NUMBER OF BUFFERS      @ZA79785 01-FREEP
001304 1C0E                          1734+         MR    0,14                  AREA TO BE FREED       @ZA79785 01-FREEP
001306 4110 1008              00008  1735+         LA    1,8(0,1)              ACCOUNT FOR BCB        @ZA86199 01-FREEP
00130A 9140 F004        00004        1736+         TM    4(15),X'40'           IS BUFCB 16 BYTES       @ZA19719 01-FREEP
00130E 47E0 20B4              01316  1737+         BNO   *+8                   BRANCH IF BUFCB = 8 BYTES     01-FREEP
001312 4110 1008              00008  1738+         LA    1,8(0,1)              ADJUST SIZE PLUS 8      @ZA87508 01-FREEP
001316 1801                          1739+         LR    0,1                   LOAD LENGTH TO BE FREED @ZA86199 01-FREEP
001318 4110 F000              00000  1740+         LA    1,0(0,15)             LOAD AREA ADDRESS             01-FREEP
00131C 0A0A                          1741+         SVC   10                    ISSUE FREEMAIN SVC            01-FREEP
                                     1742 *                                                                  00987001
00131E 1818                          1743 FRPPRT   LR    R1,R8                 R1 -> SYSIN DCB               00988001
001320 4700 20F0              01352  1744 SWITCH   NOP   SPIE                                                00989001
                                     1745 *                                                                  00990001
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  Active USINGs: IEX51002+X'2A',R2  WORKAREA,R13  IEX51000,R10

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                   1746          FREEPOOL (1)                 FREE SYSIN BUFFERS               00991001
001324 58F0 1014            00014  1747+         L     15,20(0,1)             LOAD BUFCB ADDRESS               01-FREEP
001328 9601 1017      00017        1748+         OI    23(1),1                INDICATE NO BUFCB ADDR           01-FREEP
00132C 1BEE                        1749+         SR    14,14                  CLEAR REGISTER                   01-FREEP
00132E 1B11                        1750+         SR    1,1                    CLEAR REGISTER       @ZA79785    01-FREEP
001330 BF13 F006            00006  1751+         ICM   1,3,6(15)              LOAD LENGTH OF BUFFERS @ZA86199  01-FREEP
001334 43E0 F005            00005  1752+         IC    14,5(0,15)             NUMBER OF BUFFERS    @ZA79785    01-FREEP
001338 1C0E                        1753+         MR    0,14                   AREA TO BE FREED     @ZA79785    01-FREEP
00133A 4110 1008            00008  1754+         LA    1,8(0,1)               ACCOUNT FOR BCB      @ZA86199    01-FREEP
00133E 9140 F004      00004        1755+         TM    4(15),X'40'            IS BUFCB 16 BYTES     @ZA19719   01-FREEP
001342 47E0 20E8            0134A  1756+         BNO   *+8                    BRANCH IF BUFCB = 8 BYTES        01-FREEP
001346 4110 1008            00008  1757+         LA    1,8(0,1)               ADJUST SIZE PLUS 8    @ZA87508   01-FREEP
00134A 1801                        1758+         LR    0,1                    LOAD LENGTH TO BE FREED @ZA86199 01-FREEP
00134C 4110 F000            00000  1759+         LA    1,0(0,15)              LOAD AREA ADDRESS                01-FREEP
001350 0A0A                        1760+         SVC   10                     ISSUE FREEMAIN SVC               01-FREEP
                                   1761 *                                                                      00992001
                                   1762 *        EXECUTE SPIE MACRO                                            00993001
                                   1763 *                                                                      00994001
001352 0520                        1764 SPIE     BALR  R2,0                                                    00995001
                  R:2  01354       1765          USING *,R2                                                    00996001
001354 5840 D088            00088  1766          L     R4,PICAADD                                              00997001
                                   1767 *                                                                      00998001
                                   1768          SPIE  MF=(E,(R4))                                             00999001
001358 1814                        1769+         LR    1,R4                             LOAD PARAMETER REG 1   02-IHBIN
00135A 0A0E                        1770+         SVC   14                   ISSUE THE SPIE SVC                 01-SPIE
                                   1771 *                                                                      01000001
                                   1772 *                                                                      01001001
                                   1773 *        FIND THE RETURN CODE AND RETURN TO IEX00                      01002001
                                   1774 *                                                                      01003001
00135C 9108 D080      00080        1775 RTNCODE  TM    COMPFLGS,TERR                                           01004001
001360 4780 2018            0136C  1776          BZ    NOTERM                 IF NO TERMINAL ERROR             01005001
001364 41F0 0010            00010  1777          LA    R15,16                                                  01006001
001368 47F0 2036            0138A  1778          B     RETURNN                                                 01007001
                                   1779 *                                                                      01008001
00136C 9110 D080      00080        1780 NOTERM   TM    COMPFLGS,SERR                                           01009001
001370 4780 2028            0137C  1781          BZ    NOSER                  IF NO SERIOUS ERROR              01010001
001374 41F0 0008            00008  1782          LA    R15,8                                                   01011001
001378 47F0 2036            0138A  1783          B     RETURNN                                                 01012001
                                   1784 *                                                                      01013001
00137C 1BFF                        1785 NOSER    SR    R15,R15                                                 01014001
00137E 9120 D080      00080        1786          TM    COMPFLGS,WERR                                           01015001
001382 4780 2036            0138A  1787          BZ    RETURNN                                                 01016001
001386 41F0 0004            00004  1788          LA    R15,4                                                   01017001
00138A 58D0 D004            00004  1789 RETURNN  L     R13,SAVEAREA+4                                          01018001
                                   1790 *                                                                      01019001
                                   1791          RETURN (14,12),RC=(15)                                        01020001
00138E 58ED 000C            0000C  1792+         L     14,12(13,0)                      RESTORE REGISTER 14    01-RETUR
001392 980C D014            00014  1793+         LM    0,12,20(13)                      RESTORE THE REGISTERS  01-RETUR
001396 07FE                        1794+         BR    14                               RETURN                 01-RETUR
                                   1795 *                                                                      01021001
001398                             1796          LTORG                                                         01022001
                                   1797 *                                                                      01023001
                                   1798 *        DCB                                                           01024001
                                   1799 *                                                                      01025001
                                   1800          PRINT NOGEN                                                   01026001
                                   1801 *                                                                      01027001
                                   1802          DCBD  DSORG=(PS),DEVD=(DA)                                    01028001
                                   2360 *                                                                      01029001
                                   2361          PRINT GEN                                                     01030001
                                   2362 *                                                                      01031001
000000                00000 00DA8  2363 WORKAREA DSECT                                                         01032001
                                   2364 *                                                                      01033001
                                   2365          COPY  WORKAREA                                                01034001
                                   2366=*                                                                      00001001
                                   2367=*        WORKAREA - MAPPING CSECT IEX00001                             00002001
                                   2368=*                                                                      00003001
                                   2369=*        ANY CHANGES MADE TO IEX00001 MUST BE REFLECTED IN THIS DSECT  00004001
                                   2370=*                                                                      00005001
000000 0000000000000000            2371=SAVEAREA DC    18F'0'                                                  00006001
                                   2372=*                                                                      00007001
                                   2373=*        DCB ADDRS                                                     00008001
                                   2374=*                                                                      00009001
000048                             2375=DCBTABLE DC    0F'0'                                                   00010001
000048 00000000                    2376=ALINDCB  DC    A(0)                                                    00011001
00004C 00000000                    2377=         DC    A(0)                                                    00012001
000050 00000000                    2378=         DC    A(0)                                                    00013001
000054 00000000                    2379=         DC    A(0)                                                    00014001
000058 00000000                    2380=ASYSDCB  DC    A(0)                                                    00015001
00005C 00000000                    2381=APRTDCB  DC    A(0)                                                    00016001
000060 00000000                    2382=APCHDCB  DC    A(0)                                                    00017001
000064 00000000                    2383=AUT1DCB  DC    A(0)                                                    00018001
000068 00000000                    2384=AUT2DCB  DC    A(0)                                                    00019001
00006C 00000000                    2385=AUT3DCB  DC    A(0)                                                    00020001
                                   2386=*                                                                      00021001
                                   2387=*        END OF DATA EXIT ADDRS                                        00022001
                                   2388=*                                                                      00023001
000070 00000000                    2389=EODUT1   DC    A(0)                   SYSUT1                           00024001
000074 00000000                    2390=EODUT2   DC    A(0)                   SYSUT2                           00025001
000078 00000000                    2391=EODUT3   DC    A(0)                   SYSUT3                           00026001
00007C 00000000                    2392=EODIN    DC    A(0)                   SYSIN                            00027001
                                   2393=*                                                                      00028001
                                   2394=*        OPTION SWITCHES IN COMPFLGS                                   00029001
                                   2395=*                                                                      00030001
                                   2396=*        ALLOCATION OF THE BIT POSITIONS IN COMPFLGS -                 00031001
                                   2397=*                                                                      00032001
                                   2398=*        PURPOSE                 POSITION                              00033001
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                 X390 3.1.04  2012/08/17 13.13

                                   2399=*                                 BYTE 1    BYTE 2    BYTE 3          00034001
                                   2400=*                                 01234567  01234567  01234567        00035001
                                   2401=*                                                                     00036001
                                   2402=*        COMPMODE (SYNTAX CHECK)   X                                  00037001
                                   2403=*        SUBSCRIPT OPTIMIZATION     X                                 00038001
                                   2404=*        WARNING ERROR               X                                00039001
                                   2405=*        SERIOUS ERROR                X                               00040001
                                   2406=*        TERMINATING ERROR             X                              00041001
                                   2407=*        PROCEDURE/PROGRAM              X                             00042001
                                   2408=*        LONG/SHORT PRECISION            X                            00043001
                                   2409=*        OPERAND                          X                           00044001
                                   2410=*                                                                     00045001
                                   2411=*        NOSOURCE/SOURCE                     X                        00046001
                                   2412=*        NOLOAD/LOAD                          X                       00047001
                                   2413=*        NODECK/DECK                           X                      00048001
                                   2414=*        ISO/EBCDIC                             X                     00049001
                                   2415=*        PROGRAM INTERRUPT                       X                    00050001
                                   2416=*        TERMINATING PHASE ENTERED                X                   00051001
                                   2417=*        NO BUFFERS ASSIGNED                       X                  00052001
                                   2418=*        NO COMPILATION POSSIBLE                    X                 00053001
                                   2419=*                                                                     00054001
                                   2420=*        SYSPRINT DOWN                                 X              00055001
                                   2421=*        WHOLE SOURCE PROG IN CORE                      X             00056001
                                   2422=*        NO OPTAB                                        X            00057001
                                   2423=*        SYSPRINT NOT OPENED                              X           00058001
                                   2424=*        ERROR UNRELATED TO SEMICOLON NR                   X          00059001
                                   2425=*        NOTEST/TEST (SC COUNT IN CODE, NOT SYSGEN OPT)     X         00060001
                                   2426=*        60 CHARACTER SET                                    X        00061001
                                   2427=*        (RESERVED)                                           X       00062001
                                   2428=*                                                                     00063001
000080 00220000                    2429=COMPFLGS DC    X'00220000'             PARAMETERS AND SWITCHES        00064001
                                   2430=*                                                                     00065001
                                   2431=*        OPTION SWITCHES IN COMPFLGS                                  00066001
                                   2432=*                                                                     00067001
                      00080        2433=COMPMODE EQU   X'80'                   SYNTAX CHECK MODE              00068001
                      00040        2434=SUBSCOPT EQU   X'40'                   SUBSCRIPT OPTIMIZATION         00069001
                      000FB        2435=PGR      EQU   X'FB'                                                  00070001
                      00004        2436=PROC     EQU   X'04'                   PRECOMPILED PROCEDURE          00071001
                                   2437=*                                                                     00072001
                      000FD        2438=SHRT     EQU   X'FD'                                                  00073001
                      00002        2439=LNG      EQU   X'02'                                                  00074001
                      00001        2440=OPERAND  EQU   X'01'                                                  00075001
                                   2441=*                                                                     00076001
                                   2442=*        ERROR SEVERITY INDICATORS IN COMPFLGS                        00077001
                                   2443=*                                                                     00078001
                      00020        2444=WERR     EQU   X'20'                   WARNING ERROR                  00079001
                      00010        2445=SERR     EQU   X'10'                   SERIOUS ERROR                  00080001
                      00008        2446=TERR     EQU   X'08'                   TERMINATING ERROR              00081001
                                   2447=*                                                                     00082001
                                   2448=*        OPTION SWITCHES IN COMPFLGS+1                                00083001
                                   2449=*                                                                     00084001
                      0007F        2450=SRCE     EQU   X'7F'                                                  00085001
                      00080        2451=NSRCE    EQU   X'80'                                                  00086001
                                   2452=*                                                                     00087001
                      000BF        2453=LOAD     EQU   X'BF'                                                  00088001
                      00040        2454=NLOAD    EQU   X'40'                                                  00089001
                                   2455=*                                                                     00090001
                      000DF        2456=DECK     EQU   X'DF'                                                  00091001
                      00020        2457=NDECK    EQU   X'20'                                                  00092001
                                   2458=*                                                                     00093001
                      000EF        2459=EBCDIC   EQU   X'EF'                                                  00094001
                      00010        2460=ISO      EQU   X'10'                                                  00095001
                                   2461=*                                                                     00096001
                                   2462=*        TERMINATION SWITCHES IN COMPFLGS+1                           00097001
                                   2463=*                                                                     00098001
                      00008        2464=ERR      EQU   X'08'                   PROGRAM INTERRUPT HAS          00099001
                                   2465=*                                      OCCURED IN COMPILER            00100001
                      00004        2466=TERM     EQU   X'04'                   LAST PHASE HAS BEEN ENTERED    00101001
                      00002        2467=NOBUF    EQU   X'02'                   ERROR POOL IS IN WORKAREA      00102001
                                   2468=*                                      NO SCE PROG BUFF 1             00103001
                      00001        2469=NOGO     EQU   X'01'                   COMPILATION NOT POSSIBLE       00104001
                                   2470=*                                      DO NOT START SCAN 1            00105001
                      00003        2471=NOBUNOGO EQU   X'03'                   NOBUF AND NOGO                 00106001
                                   2472=*                                                                     00107001
                                   2473=*        SWITCHES IN COMPFLGS+2                                       00108001
                                   2474=*                                                                     00109001
                      00080        2475=PRT      EQU   X'80'                   SYSPRINT NOT AVAILABLE         00110001
                      00040        2476=SPIC     EQU   X'40'                   SOURCE PROGRAM IN STORAGE      00111001
                      00020        2477=NOPT     EQU   X'20'                   NO SUBSCRIPT OPTIMIZATION      00112001
                      00010        2478=PRTNO    EQU   X'10'                   SYSPRINT NOT OPENED            00113001
                      00008        2479=NOSC     EQU   X'08'                   SEMICOLON COUNTER NOT VALID    00114001
                                   2480=*                                                                     00115001
                      00004        2481=NOTEST   EQU   X'04'                                                  00116001
                      000FB        2482=TEST     EQU   X'FB'                   EMBED SC COUNT IN CODE (DEFAULT) 00117001
                                   2483=*                                                                     00118001
                      00002        2484=SET60    EQU   X'02'                   60 CHARACTER SET IS TO BE USED 00119001
                                   2485=*                                                                     00120001
                                   2486=*        MISCELLANEOUS CONTROL INFORMATION                            00121001
                                   2487=*                                                                     00122001
000084 0000B000                    2488=SIZE     DC    F'45056'            AVAILABLE MAIN STORAGE - NOT USED  00123001
000088 00000000                    2489=PICAADD  DC    A(0)                ADDR OF PICA OF THE INVOKER        00124001
00008C 00000000                    2490=HDING    DC    F'0'                ADDR OF HEADING INFO OF THE INVOKER 00125001
000090 00000000                    2491=ERET     DC    F'0'                RETURN ADDR FOR PROGRAM            00126001
                                   2492=*                                  AND I/O ERRORS                     00127001
000094 0000000C                    2493=PAGECNT  DC    PL4'0'              PAGE COUNT                         00128001
000098 0000                        2494=LINCNT   DC    H'0'                COUNTER OF LINES PER PAGE          00129001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

00009A 0038                          2495=MAXLINES DC    H'56'               MAX NUMBER OF PRINT LINES PER PAGE   00130001
00009C 0000                          2496=SEMCNT   DC    H'0'                SEMICOLON COUNTER                    00131001
00009E 0032                          2497=PBN      DC    H'50'               HIGHEST PROGRAM BLOCK NUMBER         00132001
0000A0 0000                          2498=KBN      DC    H'0'                HIGHEST CONSTANT POOL NUMBER         00133001
                      0001C          2499=LATNR    EQU   28                  NR OF LIBRARY STAND FUNCTIONS        00134001
                      0006C          2500=LATBEG   EQU   4*(LATNR-1)                                              00135001
0000A2 006C                          2501=LN       DC    AL2(LATBEG)         LAST USED DISPLACEMENT IN LAT        00136001
0000A4 00000000                      2502=PRPT     DC    F'0'                PROGRAM POINTER                      00137001
0000A8 00000000                      2503=SAVOUTA  DC    F'0'                                                     00138001
0000AC                               2504=OUTAREA2 DS    F                   SYSPUNCH SAVE AREA                   00139001
0000B0 40404040                      2505=PIDENT   DC    CL4' '              PROGRAM IDENTIFICATION               00140001
0000B4 0000000C                      2506=CARDCNT  DC    PL4'0'              OBJECT PROGRAM DECK SEQUENCE NUMBER  00141001
0000B8 00000000                      2507=PRTRTADD DC    A(0)                ADDR OF PRINT ROUTINE                00142001
                                     2508=*                                                                   00143001
                                     2509=*        ADDRS OF AREAS WHICH ARE USED BY MORE THAN A SINGLE PHASE  00144001
                                     2510=*                                                                   00145001
0000BC 00000278                      2511=ERRPOOL  DC    A(PRELPOOL)         FIRST BYTE OF PRELIMINARY ERROR POOL 00146001
0000C0 00000278                      2512=NEXTERR  DC    A(PRELPOOL)         NEXT FREE PLACE IN ERROR POOL        00147001
0000C4                               2513=ENDPOOL  DS    F                   LAST BYTE OF ERROR POOL-23           00148001
0000C8                               2514=SRCE1ADD DS    F                   SOURCE PROGRAM BUFFER 1              00149001
0000CC                               2515=SRCE1END DS    F                   ADDR OF LAST BYTE+1                  00150001
0000D0                               2516=SULTSTRT DS    F                   ID OF LAST ITAB RECORD               00151001
                                     2517=*                                                                   00152001
                                     2518=*                                                                   00153001
                                     2519=*        TABLE OF THE LENGTHS OF VARIABLE SIZE AREAS                00154001
                                     2520=*                                                                   00155001
0000D4                               2521=INBLKS   DS    H                   MAX BLKSIZE FOR SYSIN    - NOT USED  00156001
0000D6                               2522=PRTBLKS  DS    H                   MAX BLKSIZE SYSPRINT     - NOT USED  00157001
0000D8                               2523=LINBLKS  DS    H                   MAX BLKSIZE FOR SYSLIN   - NOT USED  00158001
0000DA                               2524=PCHBLKS  DS    H                   MAX BLKSIZE FOR SYSPUNCH - NOT USED  00159001
0000DC                               2525=POOLS    DS    F                   SIZE OF ERROR POOL                   00160001
0000E0                               2526=SRCE1S   DS    F                   SIZE OF SOURCE PROG BUFFERS 1 AND 2  00161001
                      000E0          2527=SRCE3S   EQU   SRCE1S              SIZE OF SOURCE PROG BUFFERS 3 AND 4  00162001
0000E4                               2528=ITAB10S  DS    F                   SIZE OF ITAB FOR PHASE 10            00163001
0000E8                               2529=ITAB20S  DS    F                   SIZE OF ITAB FOR PHASE 20            00164001
0000EC                               2530=ITAB30S  DS    F                   SIZE OF ITAB FOR PHASE 30            00165001
0000F0                               2531=CRIDTABS DS    F                   SIZE OF CRIDTAB FOR PHASE 30         00166001
0000F4                               2532=SUTAB30S DS    F                   SIZE OF SUTAB BUFFER OF PHASE 30     00167001
0000F8                               2533=LVTAB30S DS    F                   SIZE OF LVTAB BUFFER FOR PHASE 30    00168001
0000FC                               2534=OPTABS   DS    F                   SIZE OF OPTAB BUFFERS 1 AND 2        00169001
000100                               2535=SUTAB40S DS    F                   SIZE OF SUTAB IN PHASE 40            00170001
000104                               2536=LVTAB40S DS    F                   SIZE OF LVTAB IN PHASE 40            00171001
000108                               2537=OOSTACKS DS    F                   SIZE OF OPERATOR/OPERAND STACK       00172001
                                     2538=*                                                                   00173001
                                     2539=*        AREA FOR HEADING INFORMATION TO APPEAR AT THE TOP OF       00174001
                                     2540=*        EACH NEW PAGE                                              00175001
                                     2541=*                                                                   00176001
                      0010C          2542=PAGEHEAD EQU   *                                                    00177001
00010C 4040404040404040              2543=PAGEHD1  DC    CL121' '                 FIRST HEADLINE                  00178001
000185                00185 0010C    2544=         ORG   PAGEHD1                                              00179001
00010C F1                            2545=PAGEHD1C DC    C'1'                     ASA CNTL                        00180001
00010D 4040404040404040              2546=         DC    CL10' '                  SPACER                          00181001
000117 4040404040404040              2547=PAGEHD1D DC    CL100' '                 PAGE TEXT HEADING               00182001
00017B                00017B 0017D   2548=         ORG   PAGEHD1+113                                          00183001
00017D D7C1C7C5                      2549=PAGEHD1P DC    CL4'PAGE'                PAGE                            00184001
000181 40404040                      2550=PAGENUMB DC    CL4' '                   PAGE COUNTER                    00185001
000185                00185 00185    2551=         ORG                                                        00186001
                                     2552=*                                                                   00187001
000185 4040404040404040              2553=PAGEHD2  DC    CL121' '                 SECOND HEADLINE                 00188001
0001FE                001FE 00185    2554=         ORG   PAGEHD2                                              00189001
000185 40                            2555=PAGEHD2C DC    C' '                     ASA CNTL                        00190001
000186 4040404040404040              2556=         DC    CL10' '                  SPACER                          00191001
000190 4040404040404040              2557=PAGEHD2D DC    CL100' '                 PAGE TEXT HEADING               00192001
0001F4                001F4 001FE    2558=         ORG                                                        00193001
                                     2559=*                                                                   00194001
0001FE 4040404040404040              2560=PAGEHD3  DC    CL121' '                 THIRD HEADLINE                  00195001
000277                00277 001FE    2561=         ORG   PAGEHD3                                              00196001
0001FE 40                            2562=PAGEHD3C DC    C' '                     ASA CNTL                        00197001
0001FF 4040404040404040              2563=         DC    CL10' '                  SPACER                          00198001
000209 4040404040404040              2564=PAGEHD3D DC    CL100' '                 PAGE TEXT HEADING               00199001
00026D                0026D 00277    2565=         ORG                                                        00200001
                                     2566=*                                                                   00201001
                                     2567=*                                                                   00202001
                                     2568=*        END OF STANDARD COMMON AREA                                00203001
                                     2569=*                                                                   00204001
                      00277          2570=STANDX   EQU   *                                                    00205001
                                     2571=*                                                                   00206001
                                     2572=*        THE FOLLOWING AREAS ARE NEEDED BY SOME BUT NOT ALL         00207001
                                     2573=*        PHASES AND PARTLY OVERLAY EACH OTHER                       00208001
                                     2574=*                                                                   00209001
                                     2575=*                            NAME OR PURPOSE          NEEDED BY PHASES 00210001
                                     2576=*                                                                   00211001
000277 00
000278                               2577=         DC    0F'0'                                                00212001
000278 4040404040404040              2578=PRELPOOL DC    236C' ',20C'X' PRELIMINARY ERROR POOL      IEX10     00213001
000378                00378 00416    2579=         ORG   PRELPOOL+414                                         00214001
                                     2580=*                            DCB FOR SYSIN               11         00215001
                                     2581=SYSIN    DCB   DDNAME=SYSIN,                                       X00216001
                                         =             DSORG=PS,                                             X00217001
                                         =             MACRF=(GM),                                           X00218001
                                         =             RECFM=FB,                                             X00219001
                                         =             LRECL=80,                                             X00220001
                                         =             BFTEK=S                                                00221001

                                     2583+*                      DATA CONTROL BLOCK                         01-DCB
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                      X390 3.1.04  2012/08/17 13.13

                                     2584+*                                                                  01-DCB
000416 0000
000418                               2585+SYSIN     DC    0F'0'                  ORIGIN ON WORD BOUNDARY      01-DCB

                                     2587+*              DIRECT ACCESS DEVICE INTERFACE                      01-DCB

000418 0000000000000000              2589+          DC    BL16'0'                 FDAD,DVTBL                   01-DCB
000428 00000000                      2590+          DC    A(0)                    KEYLE,DEVT,TRBAL             01-DCB

                                     2592+*              COMMON ACCESS METHOD INTERFACE                      01-DCB

00042C 00                            2594+          DC    AL1(0)                 BUFNO                        01-DCB
00042D 000001                        2595+          DC    AL3(1)                 BUFCB                        01-DCB
000430 0000                          2596+          DC    AL2(0)            BUFL                              01-DCB
000432 4000                          2597+          DC    BL2'0100000000000000'            DSORG              01-DCB
000434 00000001                      2598+          DC    A(1)                    IOBAD                        01-DCB

                                     2600+*              FOUNDATION EXTENSION                                01-DCB

000438 40                            2602+          DC    BL1'01000000'                 BFTEK,BFLN,HIARCHY     01-DCB
000439 000001                        2603+          DC    AL3(1)                 EODAD                        01-DCB
00043C 90                            2604+          DC    BL1'10010000'          RECFM                        01-DCB
00043D 000000                        2605+          DC    AL3(0)                 EXLST                        01-DCB

                                     2607+*              FOUNDATION BLOCK                                    01-DCB

000440 E2E8E2C9D5404040              2609+          DC    CL8'SYSIN'             DDNAME                       01-DCB
000448 02                            2610+          DC    BL1'00000010'          OFLGS                        01-DCB
000449 00                            2611+          DC    BL1'00000000'                         IFLG           01-DCB
00044A 5000                          2612+          DC    BL2'0101000000000000'  MACR                         01-DCB

                                     2614+*              BSAM-BPAM-QSAM INTERFACE                            01-DCB

00044C 00                            2616+          DC    BL1'00000000'                                  RER1 01-DCB
00044D 000001                        2617+          DC    AL3(1)                 CHECK, GERR, PERR            01-DCB
000450 00000001                      2618+          DC    A(1)                   SYNAD                        01-DCB
000454 0000                          2619+          DC    H'0'                   CIND1, CIND2                 01-DCB
000456 0000                          2620+          DC    AL2(0)                 BLKSIZE                      01-DCB
000458 00000000                      2621+          DC    F'0'                   WCPO, WCPL, OFFSR, OFFSW     01-DCB
00045C 00000001                      2622+          DC    A(1)                   IOBA                         01-DCB
000460 00                            2623+          DC    AL1(0)                 NCP                          01-DCB
000461 000001                        2624+          DC    AL3(1)                 EOBR, EOBAD                  01-DCB

                                     2626+*                   QSAM INTERFACE                                 01-DCB

000464 00000001                      2628+          DC    A(1)                    RECAD                        01-DCB
000468 0000                          2629+          DC    H'0'                   QSWS                         01-DCB
00046A 0050                          2630+          DC    AL2(80)          LRECL                              01-DCB
00046C 00                            2631+          DC    BL1'00000000'          EROPT                        01-DCB
00046D 000001                        2632+          DC    AL3(1)                 CNTRL                        01-DCB
000470 00000000                      2633+          DC    F'0'                   PRECL                        01-DCB
000474 00000001                      2634+          DC    A(1)                   EOB                          01-DCB
                                     2635=*         SYNAD=SYNAD      (ASSEMBLED IN IEX00001)                  00222001
                                     2636=*         EODAD=EODADIN    (INSERTED BY IEX11)                      00223001
000478                 00478 00278   2637=          ORG   PRELPOOL                                            00224001
000278                               2638=PBTAB2    DS    CL510          PROGR. BLOCK TABLE 2          20-50  00225001
000478                               2639=          DS    0F                                                  00226001
000478                               2640=PBTAB1    DS    CL255          PROGR. BLOCK TABLE 1          11-20  00227001
000577                 00577 00478   2641=          ORG   PBTAB1                                              00228001
000478                               2642=FSTAB     DS    CL255          FOR STATEMENT TABLE           30-40  00229001
                                     2643=*                              DCB FOR SYSUT1                11-30  00230001
                                     2644=SYSUT1    DCB   DDNAME=SYSUT1,                                     X00231001
                                         =                DSORG=PS,                                          X00232001
                                         =                MACRF=(R,W),                                       X00233001
                                         =                RECFM=F                                             00234001


                                     2646+*              DATA CONTROL BLOCK                                  01-DCB
                                     2647+*                                                                  01-DCB
000577 00
000578                               2648+SYSUT1    DC    0F'0'                  ORIGIN ON WORD BOUNDARY      01-DCB

                                     2650+*              DIRECT ACCESS DEVICE INTERFACE                      01-DCB

000578 0000000000000000              2652+          DC    BL16'0'                 FDAD,DVTBL                   01-DCB
000588 00000000                      2653+          DC    A(0)                    KEYLE,DEVT,TRBAL             01-DCB

                                     2655+*              COMMON ACCESS METHOD INTERFACE                      01-DCB

00058C 00                            2657+          DC    AL1(0)                 BUFNO                        01-DCB
00058D 000001                        2658+          DC    AL3(1)                 BUFCB                        01-DCB
000590 0000                          2659+          DC    AL2(0)            BUFL                              01-DCB
000592 4000                          2660+          DC    BL2'0100000000000000'            DSORG              01-DCB
000594 00000001                      2661+          DC    A(1)                    IOBAD                        01-DCB

                                     2663+*              FOUNDATION EXTENSION                                01-DCB

000598 00                            2665+          DC    BL1'00000000'                 BFTEK,BFLN,HIARCHY     01-DCB
000599 000001                        2666+          DC    AL3(1)                 EODAD                        01-DCB
00059C 80                            2667+          DC    BL1'10000000'          RECFM                        01-DCB
00059D 000000                        2668+          DC    AL3(0)                 EXLST                        01-DCB

                                     2670+*              FOUNDATION BLOCK                                    01-DCB

0005A0 E2E8E2E4E3F14040              2672+          DC    CL8'SYSUT1'            DDNAME                       01-DCB
0005A8 02                            2673+          DC    BL1'00000010'          OFLGS                        01-DCB
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D-Loc  Object Code     Addr1 Addr2  Stmt   Source Statement                                    X390 3.1.04  2012/08/17 13.13

0005A9 00                           2674+          DC    BL1'00000000'                    IFLG              01-DCB
0005AA 2020                         2675+          DC    BL2'0010000000100000'    MACR                      01-DCB

                                    2677+*                       BSAM-BPAM-QSAM INTERFACE                   01-DCB

0005AC 00                           2679+          DC    BL1'00000000'                                 RER1 01-DCB
0005AD 000001                       2680+          DC    AL3(1)                   CHECK, GERR, PERR         01-DCB
0005B0 00000001                     2681+          DC    A(1)                     SYNAD                     01-DCB
0005B4 0000                         2682+          DC    H'0'                     CIND1, CIND2              01-DCB
0005B6 0000                         2683+          DC    AL2(0)                   BLKSIZE                   01-DCB
0005B8 00000000                     2684+          DC    F'0'                     WCPO, WCPL, OFFSR, OFFSW  01-DCB
0005BC 00000001                     2685+          DC    A(1)                     IOBA                      01-DCB
0005C0 00                           2686+          DC    AL1(0)                   NCP                       01-DCB
0005C1 000001                       2687+          DC    AL3(1)                   EOBR, EOBAD               01-DCB

                                    2689+*                         BSAM-BPAM INTERFACE                      01-DCB

0005C4 00000001                     2691+          DC    A(1)                     EOBW                      01-DCB
0005C8 0000                         2692+          DC    H'0'                     DIRCT                     01-DCB
0005CA 0000                         2693+          DC    AL2(0)          LRECL                              01-DCB
0005CC 00000001                     2694+          DC    A(1)                     CNTRL, NOTE, POINT        01-DCB
                                    2695=*               SYNAD=SYNAD,    (ASSEMBLED IN IEX00001)            00235001
                                    2696=*               EODAD=EODAD1                                       00236001
                                    2697=*                                                                  00237001
0005D0                              2698=          DS    0F                                                 00238001
0005D0                              2699=SPTAB     DS    CL255           SCOPE TABLE              11-30     00239001
0006D0                              2700=          DS    0F                                                 00240001
                     006CD          2701=GPTAB     EQU   *-3             GROUP TABLE              11-30     00241001
0006D0                              2702=          DS    CL1510                                             00242001
                                    2703=*                                                                  00243001
                                    2704=*         END OF SYMLIB PART OF COMMON WORK AREA                   00244001
                                    2705=*                                                                  00245001
                                    2706 *                                                                  01035001
                                    2707 *         AREA USED BY COMPILATION PHASE                           01036001
                                    2708 *                                                                  01037001
000CB6               00CB6 00578    2709           ORG   SYSUT1                                             01038001
                                    2710 *                                                                  01039001
000578                              2711 RETADR    DS    17F                      SAVE AREA                 01040001
0005BC                              2712 PLACE14   DS    F                           -''-                   01041001
0005C0                              2713 RUTI      DS    9F                       GPR CONTROL               01042001
0005E4                              2714 RUTR      DS    4F                       FLREG CONTROL             01043001
0005F4                              2715 GPROLN    DS    H                        LABEL NR OF OBJ PRG ENTRY POINT 01044001
0005F6                              2716 KONSUM    DS    H                        WORKPLACE                 01045001
0005F8                              2717 WORKPL    DS    F                        WORKPLACE                 01046001
                     000C8          2718 IBUF1     EQU   SRCE1ADD                 ADDR OF FIRST SOURCE BUFFER 01047001
0005FC                              2719 IBUF2     DS    A                          -''  SECOND    -''-     01048001
000600                              2720 SOURCEB   DS    A                          -''  CURRENT   -''-     01049001
000604                              2721 RSRCB     DS    A                          -''  READ      -''-     01050001
000608                              2722 OPBUF1    DS    A                        ADDR OF FIRST OPTAB BUFFER 01051001
00060C                              2723 OPBUF2    DS    A                          -''-  SECOND    -''-    01052001
000610                              2724 OPBUFB    DS    A                          -''-  CURRENT   -''-    01053001
000614                              2725 ROPTB     DS    A                          -''-  READ      -''-    01054001
000618                              2726 AOPTABE   DS    A                        ADDR OF CURRENT OPTAB ENTRY 01055001
00061C                              2727 LATAB     DS    A                        ADDR OF LABEL ADDR TABLE  01056001
                     0061C          2728 APBTAB4   EQU   LATAB                    ADDR OF PBTAB4            01057001
000620                              2729 SUTABCA   DS    A                        ADDR OF LAST USED SUTAB ENTRY 01058001
000624                              2730 STRETURN  DS    F                        RETURN ADDR               01059001
000628                              2731 FREEMADR  DS    A                        ADDR FOR FREEMAIN IN 50000 01060001
00062C                              2732 FREEMSIZ  DS    F                        SIZE         -''-         01061001
                                    2733 *                                                                  01062001
000630                              2734 PBTAB3    DS    1024C                    PROGRAM BLOCK TABLE, 3RD VERS 01063001
                                    2735 *                                                                  01064001
000A30 0000000000000000             2736 IOTAB     DC    18X'00'                  LIST OF DATASETS          01065001
000A42 0000                         2737 CII       DC    H'0'                     REGISTER CONTROL          01066001
000A44 0000                         2738 CIR       DC    H'0'                         -''-                  01067001
000A46 0000                         2739 RII       DC    H'0'                         -''-                  01068001
000A48 0000                         2740 RIR       DC    H'0'                         -''-                  01069001
000A4A 0000                         2741 OPDPBN    DC    H'0'                     PROGRAM BLOCK NR (BYTE 2 OF OPD 01070001
000A4C 0000                         2742 OPDADR    DC    H'0'                     BYTES 3 AND 4 OF OPERAND  01071001
000A4E 0000                         2743 OPDLN     DC    H'0'                     LABEL NUMBER TIMES FOUR   01072001
000A50 0000                         2744 ZEROHW    DC    H'0'                     ZEROES                    01073001
000A52 00                           2745 CFSN      DC    X'00'                    CURRENT FS NUMBER         01074001
000A53 FF                           2746 MAXFSN    DC    X'FF'                    MAX FS NUMBER             01075001
000A54 F000                         2747 CLEARDIS  DC    X'F000'                  FOR CLEARING OF DISPLACEMT PART 01076001
000A56 0004                         2748 ONEENTRY  DC    H'4'                     SHORT, FOR INCR OF OT STACK PTR 01077001
000A58               00A58 00A56    2749           ORG   ONEENTRY                                           01078001
000A56 0008                         2750           DC    H'8'                     LONG            -''-      01079001
000A58 10                           2751 PRECMASK  DC    X'10'                    SHORT, TO MODIFY INSTRUCTIONS 01080001
000A59               00A59 00A58    2752           ORG   PRECMASK                                           01081001
000A58 00                           2753           DC    X'00'                    LONG            -''-      01082001
000A59 00                           2754 NUMBBL    DC    X'00'                    RECORD COUNTER            01083001
000A5A                              2755           DS    H                                                  01084001
000A5C 0000                         2756 SPBNST    DC    H'0'                     CURRENT PBN               01085001
000A5E                              2757           DS    H                                AND DISPLACEMENT  01086001
000A60 00FF                         2758 GPBN      DC    H'255'                   GLOBAL DSA CONTROL        01087001
000A62 0FFC                         2759 MAXOVERF  DC    H'4092'                  SHORT, TO CHECK OT STACK OVERFL 01088001
000A64               00A64 00A62    2760           ORG   MAXOVERF                                           01089001
000A62 0FF8                         2761           DC    H'4088'                  LONG            -''-      01090001
000A64                              2762 HALFW     DS    H                        WORKPLACE                 01091001
000A66                              2763 USPEI2    DS    H                        FOR ARRAY DECLA-          01092001
000A68                              2764 USPEI4    DS    H                                RATION HANDLING   01093001
000A6A                              2765 WPLACE    DS    H                        FOR INSTRUCTION GENERATION 01094001
000A6C                              2766 XPLACE    DS    H                                                  01095001
000A6E                              2767 YPLACE    DS    H                                                  01096001
000A70                              2768 UPLACE    DS    H                                                  01097001
000A72                              2769 VPLACE    DS    C                              -''-                01098001
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D-Loc  Object Code      Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000A73                               2770 STRDNAME DS    5C                  TO STORE OPERAND                  01099001
000A78                               2771 CBVTAB   DS    48C                 CALLED-BY-VALUE TABLE             01100001
000AA8                               2772 SUTABC   DS    768C                                                  01101001
000DA8                  00DA8 00AA8  2773          ORG   SUTABC                                                01102001
000AA8                               2774 DSTAB    DS    608C                DATASET TABLE                     01103001
                                     2775 *                                                                    01104001
                                     2776 *        REGISTER EQUATES                                            01105001
                                     2777 *                                                                    01106001
                                     2778          IEZREGS                                                     01107001
                        00000        2779+R0       EQU   0                                                     01-IEZRE
                        00001        2780+R1       EQU   1                                                     01-IEZRE
                        00002        2781+R2       EQU   2                                                     01-IEZRE
                        00003        2782+R3       EQU   3                                                     01-IEZRE
                        00004        2783+R4       EQU   4                                                     01-IEZRE
                        00005        2784+R5       EQU   5                                                     01-IEZRE
                        00006        2785+R6       EQU   6                                                     01-IEZRE
                        00007        2786+R7       EQU   7                                                     01-IEZRE
                        00008        2787+R8       EQU   8                                                     01-IEZRE
                        00009        2788+R9       EQU   9                                                     01-IEZRE
                        0000A        2789+R10      EQU   10                                                    01-IEZRE
                        0000B        2790+R11      EQU   11                                                    01-IEZRE
                        0000C        2791+R12      EQU   12                                                    01-IEZRE
                        0000D        2792+R13      EQU   13                                                    01-IEZRE
                        0000E        2793+R14      EQU   14                                                    01-IEZRE
                        0000F        2794+R15      EQU   15                                                    01-IEZRE
                                     2795 *                                                                    01108001
                                     2796 *        CHARACTER EQUATES                                           01109001
                                     2797 *                                                                    01110001
                                     2798          IEXCHAR                                                     01111001
                                     2799+*                                                                    01-IEXCH
                                     2800+*        CHARACTER A - Z                                             01-IEXCH
                                     2801+*                                                                    01-IEXCH
                        00040        2802+XFA      EQU   X'40'                                                 02-IEXCG
                        00041        2803+XFB      EQU   X'41'                                                 02-IEXCG
                        00042        2804+XFC      EQU   X'42'                                                 02-IEXCG
                        00043        2805+XFD      EQU   X'43'                                                 02-IEXCG
                        00044        2806+XFE      EQU   X'44'                                                 02-IEXCG
                        00045        2807+XFF      EQU   X'45'                                                 02-IEXCG
                        00046        2808+XFG      EQU   X'46'                                                 02-IEXCG
                        00047        2809+XFH      EQU   X'47'                                                 02-IEXCG
                        00048        2810+XFI      EQU   X'48'                                                 02-IEXCG
                        00049        2811+XFJ      EQU   X'49'                                                 02-IEXCG
                        0004A        2812+XFK      EQU   X'4A'                                                 02-IEXCG
                        0004B        2813+XFL      EQU   X'4B'                                                 02-IEXCG
                        0004C        2814+XFM      EQU   X'4C'                                                 02-IEXCG
                        0004D        2815+XFN      EQU   X'4D'                                                 02-IEXCG
                        0004E        2816+XFO      EQU   X'4E'                                                 02-IEXCG
                        0004F        2817+XFP      EQU   X'4F'                                                 02-IEXCG
                        00050        2818+XFQ      EQU   X'50'                                                 02-IEXCG
                        00051        2819+XFR      EQU   X'51'                                                 02-IEXCG
                        00052        2820+XFS      EQU   X'52'                                                 02-IEXCG
                        00053        2821+XFT      EQU   X'53'                                                 02-IEXCG
                        00054        2822+XFU      EQU   X'54'                                                 02-IEXCG
                        00055        2823+XFV      EQU   X'55'                                                 02-IEXCG
                        00056        2824+XFW      EQU   X'56'                                                 02-IEXCG
                        00057        2825+XFX      EQU   X'57'                                                 02-IEXCG
                        00058        2826+XFY      EQU   X'58'                                                 02-IEXCG
                        00059        2827+XFZ      EQU   X'59'                                                 02-IEXCG
                                     2828+*                                                                    01-IEXCH
                                     2829+*        NATIONAL CHARACTERS                                         01-IEXCH
                                     2830+*                                                                    01-IEXCH
                        0005A        2831+XFDOLLAR EQU   X'5A'                                                 02-IEXCG
                        0005B        2832+XFUNDER  EQU   X'5B'                                                 02-IEXCG
                        0005C        2833+XFHASH   EQU   X'5C'                                                 02-IEXCG
                        0005D        2834+XFAT     EQU   X'5D'                                                 02-IEXCG
                                     2835+*                                                                    01-IEXCH
                                     2836+*        NUMERIC 0 - 9                                               01-IEXCH
                                     2837+*                                                                    01-IEXCH
                        00030        2838+XF0      EQU   X'30'                                                 02-IEXCG
                        00031        2839+XF1      EQU   X'31'                                                 02-IEXCG
                        00032        2840+XF2      EQU   X'32'                                                 02-IEXCG
                        00033        2841+XF3      EQU   X'33'                                                 02-IEXCG
                        00034        2842+XF4      EQU   X'34'                                                 02-IEXCG
                        00035        2843+XF5      EQU   X'35'                                                 02-IEXCG
                        00036        2844+XF6      EQU   X'36'                                                 02-IEXCG
                        00037        2845+XF7      EQU   X'37'                                                 02-IEXCG
                        00038        2846+XF8      EQU   X'38'                                                 02-IEXCG
                        00039        2847+XF9      EQU   X'39'                                                 02-IEXCG
                                     2848+*                                                                    01-IEXCH
                                     2849+*        SPECIAL CHARS                                               01-IEXCH
                                     2850+*                                                                    01-IEXCH
                        00000        2851+XFPLUS   EQU   X'00'                                                 02-IEXCG
                        00001        2852+XFMINUS  EQU   X'01'                                                 02-IEXCG
                        00002        2853+XFASTER  EQU   X'02'                                                 02-IEXCG
                        00003        2854+XFSLASH  EQU   X'03'                                                 02-IEXCG
                        00006        2855+XFLBRAC  EQU   X'06'                                                 02-IEXCG
                        00007        2856+XFCOLON  EQU   X'07'                                                 02-IEXCG
                        00008        2857+XFLSQBR  EQU   X'08'                                                 02-IEXCG
                        0000B        2858+XFSCOLON EQU   X'0B'                                                 02-IEXCG
                        00010        2859+XFEQUAL  EQU   X'10'                                                 02-IEXCG
                        00011        2860+XFLT     EQU   X'11'                                                 02-IEXCG
                        00012        2861+XFGT     EQU   X'12'                                                 02-IEXCG
                        00020        2862+XFNOT    EQU   X'20'                                                 02-IEXCG
                        00022        2863+XFOR     EQU   X'22'                                                 02-IEXCG
                        00023        2864+XFAMPER  EQU   X'23'                                                 02-IEXCG
                        00025        2865+XFCOMMA  EQU   X'25'                                                 02-IEXCG
```

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  Active USINGs: IEX51002+X'11C',R2  WORKAREA,R13  IEX51000,R10

D-Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                      00026        2866+XFRBRAC  EQU   X'26'                                                      02-IEXCG
                      00028        2867+XFRSQBR  EQU   X'28'                                                      02-IEXCG
                      0002B        2868+XFBLANK  EQU   X'2B'                                                      02-IEXCG
                      0002D        2869+XFPERIOD EQU   X'2D'                                                      02-IEXCG
                      0002E        2870+XFQUOTE  EQU   X'2E'                                                      02-IEXCG
                                   2871+*                                                                         01-IEXCH
                      0000C        2872+XFDQUOTE EQU   X'0C'                                                      02-IEXCG
                                   2873+*                                                                         01-IEXCH
                      0002C        2874+XFEXCLM  EQU   X'2C'                                                      02-IEXCG
                      0002C        2875+XFPERCT  EQU   X'2C'                                                      02-IEXCG
                                   2876+*                                                                         01-IEXCH
                                   2877+*        INTERNAL CONTROL CODES                                           01-IEXCH
                                   2878+*                                                                         01-IEXCH
                      00005        2879+XFPOWER    EQU   X'05'                                                    01-IEXCH
                      00016        2880+XFASSIGN   EQU   X'16'                                                    01-IEXCH
                      00017        2881+XFGOTO     EQU   X'17'                                                    01-IEXCH
                      00018        2882+XFFOR      EQU   X'18'                                                    01-IEXCH
                      0001D        2883+XFIF       EQU   X'1D'                                                    01-IEXCH
                      00027        2884+XFLABEL    EQU   X'27'                                                    01-IEXCH
                      00029        2885+XFDELTA    EQU   X'29'                                                    01-IEXCH
                      0002C        2886+XFEND      EQU   X'2C'                                                    01-IEXCH
                      0002F        2887+XFZETA     EQU   X'2F'                                                    01-IEXCH
                      0003E        2888+XFDECPT    EQU   X'3E'                                                    01-IEXCH
                                   2889 *                                                                         01112001
                                   2890          END                                                              01113001
```

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Symbol    Length    Value     Id    Type Asm  Program    Defn  References                      X390 3.1.04  2012/08/17 13.13

=A(IEX51002)
               4 0000058C 00000001  A A               609   601
=A(IEX60000)
               4 00000588 00000001  A A               608   600
ADRPRP         4 00000614 00000001  A A               653   438M  453   463   497
ALAT           4 00000698 00000001  A A               727   175M  190   218
ALINDCB        4 00000048 FFFFFFFE  A A              2376   505   890
APBT           4 00000694 00000001  A A               726   239M  277   439
APBTAB4        4 0000061C FFFFFFFE  U                2728   241   268   545
APCHDCB        4 00000060 FFFFFFFE  A A              2382   515   888   904
ASTART         3 0000069D 00000001  R A               729   434M
AWADDTAB       4 00000F2C 00000004  F F              1356  1056  1312
AWEMPOOL       4 00000F28 00000004  F F              1355  1026M 1047
BLANKS         5 00000F44 00000004  C C              1364  1097
BLNR           3 00000718 00000001  C C               743   551M  552M  553
BOTH           4 000008FE 00000001  I                 901   886B
CARDCNT        4 000000B4 FFFFFFFE  P P              2506   500M  501   918M  919
CLOSEB         4 0000127C 00000005  I                1689  1684B
CLOSEDCB       2 00001260 00000005  I                1676  1657  1664B
COMPFLGS       4 00000080 FFFFFFFE  X X              2429   160M  161   163   202   410   412   414   435   445   461
                                                            492   503   513   640M  885   887  1030  1077M 1082M 1083M
                                                           1086M 1169  1284  1301  1306  1325M 1656M 1663  1703  1723
                                                           1775  1780  1786
COMPMODE       1 00000080           U                2433   161   410   640  1083
COT01          4 00000A66 00000004  I                1047  1036B 1279B 1333B
COT03A         4 00000AC0 00000004  I                1080  1076B
COT03B         4 00000AD4 00000004  I                1086  1081B
COT04          2 00000AD8 00000004  I                1090  1078B 1084B
COT05          4 00000B36 00000004  I                1118  1110B 1156B
COT06          4 00000B3E 00000004  I                1125  1118B
COT07          4 00000BA0 00000004  I                1160  1132B
COT08          4 00000B90 00000004  I                1153  1165B 1194B
COT09          4 00000B98 00000004  I                1155  1142B 1146B 1163B
COT10          4 00000BB6 00000004  I                1169  1134B
COT11          2 00000C14 00000004  I                1196  1189B
COT12          4 00000C3E 00000004  I                1213  1119B
COT17          4 00000C68 00000004  I                1229  1227B
COT18          4 00000D56 00000004  I                1303  1031B
COT18A         4 00000D5E 00000004  I                1306  1302B
COT19          4 00000C88 00000004  I                1239  1237B
COT20          4 00000C6C 00000004  I                1230  1242B
COT21          2 00000D06 00000004  I                1274  1232B
COT24          4 00000CA0 00000004  I                1251  1260M
COT25          4 00000C96 00000004  I                1246  1214B
COT26          4 00000B02 00000004  I                1101  1096B
COT27          4 00000CF6 00000004  I                1266  1225B 1235B 1315B 1318B
COT28          4 00000D2C 00000004  I                1285  1034B
COT29          2 00000D36 00000004  H H              1290  1286B 1326B
COT30          4 00000B84 00000004  I                1150  1130B
COT31          4 00000B14 00000004  I                1108  1099B
COT32          4 00000BC6 00000004  I                1174  1170B
COT32A         4 00000BCA 00000004  I                1175  1172B
COT32B         4 00000BF0 00000004  I                1185  1181B
COT33          4 00000C1E 00000004  I                1202  1136B
COT34          6 00000C34 00000004  I                1208  1205M
COT35          4 00000B94 00000004  I                1154  1198B 1209B
COT36          4 00000A80 00000004  I                1055  1052B
COT37          4 00000B6A 00000004  I                1140  1129B
COT38          4 00000B74 00000004  I                1143  1145B
CPI           20 00000F14 00000004  C C              1351  1316
DCBBIT0        1 00000080           U                1824  1910  1918  1930  1953  1980  1982  1983  1985  2008  2011
                                                           2031  2035  2050  2087  2142  2173  2212  2216  2229  2329
                                                           2331  2341
DCBBIT1        1 00000040           U                1825  1911  1919  1932  1954  1955  1964  1980  1982  1984  1985
                                                           2013  2031  2033  2035  2053  2054  2055  2090  2091  2142
                                                           2175  2218  2220  2232  2276  2329  2333  2342
DCBBIT2        1 00000020           U                1826  1912  1920  1933  1934  1935  1954  1955  1959  1965  1980
                                                           1981  1986  2015  2036  2037  2058  2059  2060  2094  2095
                                                           2143  2180  2221  2237  2279  2282  2329  2343
DCBBIT3        1 00000010           U                1827  1913  1933  1935  1936  1954  1967  1987  2018  2036  2039
                                                           2062  2063  2064  2098  2099  2143  2182  2185  2187  2223
                                                           2238  2279  2283  2329
DCBBIT4        1 00000008           U                1828  1921  1968  1988  2019  2041  2046  2047  2067  2068  2102
                                                           2103  2105  2106  2144  2190  2239  2279  2284
DCBBIT5        1 00000004           U                1829  1922  1969  1991  1992  2021  2041  2043  2044  2047  2071
                                                           2073  2074  2075  2109  2110  2111  2112  2144  2192  2195
                                                           2225  2241  2274
DCBBIT6        1 00000002           U                1830  1914  1970  1971  1974  1991  1993  2022  2078  2079  2080
                                                           2081  2115  2116  2117  2118  2145  2198  2243  2285
DCBBIT7        1 00000001           U                1831  1915  1970  1972  1974  1995  2026  2083  2084  2121  2122
                                                           2124  2125  2201  2227  2244  2287
DCBFDAD        8 00000005 FFFFFFFF  C C              1851  1854
DCBOFLGS       1 00000030 FFFFFFFF  B B              2007  1682
DCBOFOPN       1 00000010           U                2018  1682
DCBTABLE       4 00000048 FFFFFFFE  F F              2375  1680
DEC            8 00000700 00000001  D D               740   532M  550M  551   556M  580
DSTAB          1 00000AA8 FFFFFFFE  C C              2774   300
DSTABLE        4 0000061C 00000001  F F               660   327   331   341   376   698
DSTABLEL       1 00000024           U                 698   327   331   341   344   376
DSTABLGT       2 00000640 00000001  H H               701   320M  398   416
DSTABPRP       4 0000060C 00000001  A A               651   301M  426   473
EDAREA         8 00000710 00000001  C C               742   534   558   579M  580M
EDNR           6 00000556 00000001  I                 579   533B  557B
EDPTRN         8 00000708 00000001  X X               741   579
ENDPOOL        4 000000C4 FFFFFFFE  F F              2513   638
ENDREC        80 00000644 00000001  C C               706   512   522   707   721
ENDRECA        3 00000649 00000001  C C               711   497M
```

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Symbol    Length   Value     Id      Type Asm  Program   Defn  References                           X390 3.1.04  2012/08/17 13.13

ENDRECC        4 00000690 00000001  C C                  723   501M  502M
ENDRECD        5 00000673 00000001  C C                  720   490M
ENDRECID       2 00000652 00000001  C C                  713   498M
ENDRECK        4 0000068C 00000001  C C                  722   499M
ENDRECL        4 00000660 00000001  C C                  716   491M
ENDRECN        8 00000654 00000001  C C                  714   494M
EP0            4 00000731 00000001  X X                  749   643
EP188          4 00000724 00000001  X X                  746   620M  621M  622M  626M  627M  628M  630M  631M  635
ERET           4 00000090 FFFFFFFE  F F                 2491   159M 1028M 1281M 1658M 1679M
ERR            1 00000008           U                   2464  1306
ERRINFO        4 00000740 00000001  V V                  753   602
ERRPOOL        4 000000BC FFFFFFFE  A A                 2511  1032  1282  1667
ERR188         2 00000590 00000001  I                    615   326B  330B  369B
ER1            4 000005B4 00000001  I                    626   618B
ER2            4 000005C6 00000001  I                    630   624B
ER3            6 000005D8 00000001  I                    635   633M
ER4            6 000005F4 00000001  I                    643   639B
ESDCON         7 00000A06 00000001  X X                  998   943
ESDT           1 00000968 00000001  X X                  932   843
ESID           2 00000A04 00000001  H H                  997   944   946M
EXMVC          6 00000CEC 00000004  I                   1260  1247X
FREEMADR       4 00000628 FFFFFFFE  A A                 2731   587
FREEMSIZ       4 0000062C FFFFFFFE  F F                 2732   586
FRPPCH         4 000012E6 00000005  I                   1723  1704B
FRPPRT         2 0000131E 00000005  I                   1743  1724B
GENESD         4 0000085A 00000001  I                    842   208B  447B  464B  474B
GENRLD         4 00000876 00000001  I                    855   192B  228B  289B  427B  454B
GENTXTS        4 00000866 00000001  I                    848   172B  180B  272B  421B  440B
GEN1           4 0000088C 00000001  I                    860   844B  851B
GEN3           4 000008CE 00000001  I                    884   862B  864B  879B
GEN4           2 000008C6 00000001  I                    878   970B  992B
GEN5           6 000009DE 00000001  I                    985   991B
GEN6           4 000008A4 00000001  I                    865   924B  927B
HEADD1        11 00000EEE 00000004  C C                 1348  1035  1042
HEADD2        27 00000EF9 00000004  C C                 1349  1043
HEAD1         30 000006A0 00000001  C C                  731   531
IEX51ER1       1 00000564 00000001  U                    585   141   158
IEX51ER2       1 00000576 00000001  U                    597   142
IEX51M00       1 00000000 00000002  T                    753   753
IEX51M01       1 00000000 00000003  T                    754   754
IEX51000       1 00000000 00000001  J                    132   150U
IEX51002       1 00001238 00000005  J                   1651   609
IEX60000       1 00000A10 00000004  J                   1008   608  1010U
IHADCB         1 00000000 FFFFFFFF  J                   1807  1681U 1892  1939  2004  2133  2148  2155  2168  2264  2270
                                                              2297  2320
IHB0013A       2 00000CEA 00000004  H H                 1257  1251B
IOTAB          1 00000A30 FFFFFFFE  X X                 2736   302
KBN            2 000000A0 FFFFFFFE  H H                 2498   256   281
KDSA          23 000006DC 00000001  C C                  738   538
KH4096         2 0000061A 00000001  H H                  655   260
KOBJSZ        18 000006BE 00000001  C C                  733   536   736
KOBJSZB        6 000006D0 00000001  C C                  734   534M
KOBJSZL        1 0000001E           U                    736   536
KPBN          11 000006F3 00000001  C C                  739   541   542
KP1            1 00000A0D 00000001  P P                  999   500   918
LAST           4 00000DAE 00000004  I                   1330  1304B 1307B
LATAB          4 0000061C FFFFFFFE  A A                 2727   176   199   219  2728
LATBEG         1 0000006C           U                   2500   186   191  2501
LATNR          1 0000001C           U                   2499   200   220  2500
LDENTRY        1 00000001           U                    837   941
LINCNT         2 00000098 FFFFFFFE  H H                 2494   526M 1037M
LN             2 000000A2 FFFFFFFE  R A                 2501   177
LNG            1 00000002           U                   2439   202   435
LNGTAB         5 000007D3 00000001  C C                  791   204
LPGCF          1 0000001C           U                    137   419
MAXOVERF       2 00000A62 FFFFFFFE  H H                 2759  2760
MDSN           2 00000618 00000001  H H                  654   315M  318
MODNUMB        2 00000F30 00000004  H H                 1357  1053  1309
NDECK          1 00000020           U                   2457   163   412   513   885   887  1723
NEXTERR        4 000000C0 FFFFFFFE  A A                 2512   634   637M  645M 1033  1277  1283M 1319  1330
NLOAD          1 00000040           U                   2454   163   412   503   885  1703
NOBUF          1 00000002           U                   2467  1663
NOSC           1 00000008           U                   2479   160
NOSER          2 0000137C 00000005  I                   1785  1781B
NOTERM         4 0000136C 00000005  I                   1780  1776B
NRTRA         10 00000735 00000001  C C                  751   621   627
NSRCE          1 00000080           U                   2451  1325
ONEENTRY       2 00000A56 FFFFFFFE  H H                 2748   249  2749
OUTAREA2       4 000000AC FFFFFFFE  F F                 2504   901   911M
PAGEHD1      121 0000010C FFFFFFFE  C C                 2543  2544  2548
PAGEHD1C       1 0000010C FFFFFFFE  C C                 2545   527M  528M 1038M 1039M
PAGEHD1D     100 00000117 FFFFFFFE  C C                 2547   529   530   531M 1040  1041  1042M
PAGEHD2      121 00000185 FFFFFFFE  C C                 2553  2554
PAGEHD2D     100 00000190 FFFFFFFE  C C                 2557   529M 1040M 1043M
PAGEHD3      121 000001FE FFFFFFFE  C C                 2560  2561
PAGEHD3D     100 00000209 FFFFFFFE  C C                 2564   530M 1041M
PAGEHEAD       1 0000010C FFFFFFFE  U                   2542  1035
PBN            2 0000009E FFFFFFFE  H H                 2497   243   259   284   546
PBTAB1       255 00000478 FFFFFFFE  C C                 2640  2641
PBTAB3         1 00000630 FFFFFFFE  C C                 2734   240
PICAADD        4 00000088 FFFFFFFE  A A                 2489  1766
PIDENT         4 000000B0 FFFFFFFE  C C                 2505   245   499   917
POOLS          4 000000DC FFFFFFFE  F F                 2525  1665
PRECMASK       1 00000A58 FFFFFFFE  X X                 2751  2752
PRELPOOL       1 00000278 FFFFFFFE  C C                 2578  2511  2512  2579  2637
PRINTT         4 00000546 00000001  I                    571   535B  537B  539B  544B  564B
PROC           1 00000004           U                   2436   414   445   461   492
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Symbol    Length    Value      Id    Type Asm  Program    Defn  References                       X390 3.1.04  2012/08/17 13.13

PRPT           4 000000A4 FFFFFFFE  F F              2502   434
PRPTAR         4 00000608 00000001  A A               650   168M  169
PRT            1 00000080           U                2475  1030  1301
PRTNO          1 00000010           U                2478  1030
PRTRTADD       4 000000B8 FFFFFFFE  A A              2507   572  1267
PUNCHOUT       6 00000920 00000001  I                 914   899B
PUT1           2 000008EA 00000001  I                 893   889B
PUT1A          4 000008E6 00000001  I                 890   912B
RANDP          4 000009D6 00000001  C C               979   857M  985
RETURNN        4 0000138A 00000005  I                1789  1778B 1783B 1787B
RLDFLAG        1 0000000C           U                 838   987
RLDT           1 000009CE 00000001  X X               975   856
R0             1 00000000           U                2779   866M  867   871   873   874   947  1657M 1658  1665M 1666M
                                                           1678M 1679
R1             1 00000001           U                2780   375M  377   379   385   394M  489   505M  508   512   515M
                                                            518   522   536   538   541   542M  553   558   562M  587M
                                                            602M  860M  861   863   866   872   874M  888M  890M  893
                                                            897   902M  903   904M  907   911   914   915   916   917
                                                            919   920   921   922   925   926   940   943   947M  948
                                                            950   967   984   985   986   987   988M  990  1026  1316
                                                           1317  1322  1323  1339  1340  1667M 1705M 1725M 1743M
R10            1 0000000A           U                2789   150U  153M 1050M 1051  1053M 1054  1065M 1069  1073M 1074
                                                           1075  1080  1090M 1091M 1092  1101M 1102  1111M 1115  1126M
                                                           1150M 1151M 1161M 1162  1164M 1176M 1177M 1178M 1179  1184M
                                                           1185M 1186M 1188  1190M 1192  1193M 1197  1206M 1224M 1230M
                                                           1280M 1281  1282M 1283  1309M 1310  1320M 1321  1331M 1332
                                                           1338  1339  1340
R11            1 0000000B           U                2790   218M  227   233M  248M  251M  252   307M  312   323M  328M
                                                            363M  555M  556   617   619M  620   626   634M  635   636M
                                                            637   638   643   644M  645  1112M 1113M 1114M 1115M 1116
                                                           1117  1127M 1152M 1153  1154  1160M 1162M 1171M 1174M 1190
                                                           1191M 1192M 1196M 1203M 1204M 1205  1207  1218M 1220M 1222M
                                                           1226M 1228  1231M 1234M 1236M 1238  1246M 1247
R12            1 0000000C           U                2791  1066M 1067M 1118M 1680M
R13            1 0000000D           U                2792   151U 1025U 1789M
R14            1 0000000E           U                2793   172M  180M  192M  228M  272M  289M  325M  368M  421M  427M
                                                            440M  454M  533M  535M  537M  539M  544M  557M  564M  571
                                                            573M  574M  575B  581B  601M  641B  842M  848   849M  855
                                                            857   858M  859M  868   870   875M  878M  884   898M  901M
                                                            903  1029  1108M 1117M 1141  1143  1144M 1154M 1197  1208
                                                           1218  1266  1268M 1269M 1285M 1287B 1338
R15            1 0000000F           U                2794   146   153   571   572M  573B  574M  595M  598U  611D  865M
                                                            867M  868   870M  871M  872   873M  875   965M  966   968
                                                            969   984M  990  1029  1225M 1235M 1239M 1240  1266  1267M
                                                           1268B 1269M 1270B 1285M 1315M 1318M 1777M 1782M 1785M 1788M
R2             1 00000002           U                2781   158M  159   171M  176M  190M  191M  208M  227M  243M  254M
                                                            256M  257M  259M  266M  268M  270   284M  285   286M  287
                                                            288M  300M  322   327   331   332   333   340   374   399
                                                            406   417   426M  439M  447M  453M  464M  474M  540M  543M
                                                            548M  563M  586M  600M  603B  940   941   942   949   951
                                                            967   969M  986   989M 1010U 1653M 1654U 1676M 1677U 1764M
                                                           1765U
R3             1 00000003           U                2782   177M  178M  179   185M  187M  189   240M  248   253M  260M
                                                            261   263   265M  306M  308   311M  312   314   315   317M
                                                            318M  319M  320   321M  322   334M  335M  345M  350   354M
                                                            355M  356   360M  361M  362   363   372M  373M  395M  398M
                                                            399M  400   401   403   416M  419M  420   545M  554M  555
                                                            843M  850M  856M  861   863   876   914   921   922   923
                                                            944M  945M  946   950  1140M 1141M 1145M 1175M 1182M 1186
                                                           1680M 1705
R4             1 00000004           U                2783   186M  187   241M  242   244M  245   246   247M  252   255M
                                                            262   263   264M  269   308M  309   340M  341   342   343
                                                            344M  350M  351   353   356M  357   359   362M  364   366
                                                            371   374M  376   381   382   387   388   391   392   393M
                                                            402M  403   547M  549M  550   848M  855M  880B 1047M 1766M
                                                           1769
R5             1 00000005           U                2784   199M  205   212M  219M  223   234M  249M  250M  251   261M
                                                            265   269M  270M  271   281M  282   285M  296M  303M  314M
                                                            316M  334   355   361   373  1032M 1033  1049  1091  1095
                                                           1098  1101  1160  1164  1178  1203  1206  1275  1276M 1278
                                                           1330M 1332M
R6             1 00000006           U                2785   168   175   239   301   321   438   491   532   925   968M
                                                           1062M 1128  1131  1133  1135  1150  1152  1155M 1176
R7             1 00000007           U                2786   200M  214M  220M  235M  277M  287M  288   295M  302M  304
                                                            308   324   329   337   338   348   350   353   356   362
                                                            375   396  1048M 1049M 1051  1054M 1055M 1057M 1058M 1062
                                                           1064  1073  1109  1111  1113  1114  1151  1308M 1310M 1311M
                                                           1313M 1314M 1317
R8             1 00000008           U                2787   154M  242   246   262   282   546M  559M  560M 1681U 1683D
                                                           1743
R9             1 00000009           U                2788   201M  204M  207   213M  221M  225M  226   615M  616M  617
                                                            619   623M  629M  630   632M  633   636  1027M 1028  1056M
                                                           1057  1063M 1064M 1065  1066  1068M 1069M 1073  1125M 1177
                                                           1187M 1188  1202M 1204  1219M 1220  1221M 1222  1223M 1228M
                                                           1229  1230  1233M 1234  1238M 1240M 1241  1274M 1275M 1276
                                                           1277M 1278  1312M 1313  1319M 1321M 1322  1725
SAVEAREA       4 00000000 FFFFFFFE  F F              2371  1789
SAVELT         4 00000A00 00000001  F F               996   884M  898
SAVOUTA        4 000000A8 FFFFFFFE  F F              2503   860   897M  902
SERR           1 00000010           U                2445  1082  1780
SET60          1 00000002           U                2484  1169
SHRTAB         5 0000074C 00000001  C C               761   201
SPIE           2 00001352 00000005  I                1764  1678  1744B
SRCE1ADD       4 000000C8 FFFFFFFE  F F              2514  2718
SRCE1S         4 000000E0 FFFFFFFE  F F              2526  1666  2527
SUTABC         1 00000AA8 FFFFFFFE  C C              2772  2773
SV             4 0000071C 00000001  F F               744   489M  490   571M  574
```

```
Symbol    Length    Value      Id     Type Asm  Program    Defn  References                          X390 3.1.04  2012/08/17 13.13

SVAR1          4 00000F3C 00000004  F F              1363  1029M 1285
SVAR2          4 00000F34 00000004  F F              1362  1266M 1269
SW             1 0000069C 00000001  X X               728   437M
SWITCH         4 00001320 00000005  I                1744  1685M
SWTO           1 00000F32 00000004  X X              1361  1213  1303M
SYSUT1         4 00000578 FFFFFFFE  F F              2648  2709
TERM           1 00000004           U                2466  1656
TERR           1 00000008           U                2446  1086  1284  1775
TRINTEXT       8 00000F49 00000004  C C              1370  1208
TRM10          4 000001CA 00000001  I                 300   162B  164B  283B
TRM11          4 000001EA 00000001  I                 308   313B
TRM11A         2 000001FE 00000001  I                 314   310B
TRM12A         2 00000204 00000001  I                 316   305B
TRM14          4 00000286 00000001  I                 350   354B
TRM14A         4 00000298 00000001  I                 354   352B
TRM15          2 0000029C 00000001  I                 355   349B
TRM16          4 0000029E 00000001  I                 356   360B
TRM16A         4 000002AE 00000001  I                 360   358B
TRM17          4 000002B4 00000001  I                 362   372B
TRM17A         4 000002D4 00000001  I                 371   367B
TRM18          4 000002D8 00000001  I                 372   365B  368
TRM19          2 0000024C 00000001  I                 334   325
TRM191         6 00000264 00000001  I                 341   345B
TRM192         4 0000027E 00000001  I                 348   339B
TRM20          6 000002E6 00000001  I                 376   395B
TRM21          4 00000308 00000001  I                 385   378B
TRM21A         4 0000031C 00000001  I                 391   386B
TRM211         4 00000324 00000001  I                 393   380B  383B  389B
TRM22          4 00000330 00000001  I                 396   336B  346B
TRM23          4 0000035A 00000001  I                 410   404B
TRM23A         4 00000382 00000001  I                 420   418B
TRM23B         2 0000038A 00000001  H H               422   420M
TRM24          6 0000039A 00000001  I                 434   415B
TRM24A         4 000003AC 00000001  I                 438   436B
TRM26          3 000003F9 00000001  X X               467   463M
TRM27          4 00000356 00000001  I                 406   397B
TRM29          8 000003C6 00000001  C C               448   494
TRM32ID        2 00000396 00000001  H H               429   498
TRM33          6 0000044C 00000001  I                 499   495B
TRM34          6 00000440 00000001  I                 497   493B
TRM35          4 0000041A 00000001  I                 486   462B
TRM37          4 00000564 00000001  I                 586   411B  413B  561B  646B
TRM39          2 00000074 00000001  H H               181   179M  185
TRM4           4 0000005C 00000001  I                 175   170B
TRM41          2 00000094 00000001  H H               193   189M
TRM42          4 0000009A 00000001  I                 199   188B
TRM43          8 000000C4 00000001  C C               209   207M
TRM44          4 000000B2 00000001  I                 205   203B  214B
TRM45          4 000000CE 00000001  I                 212   206B
TRM47          2 00000102 00000001  H H               230   226M
TRM48          4 00000106 00000001  I                 233   224B
TRM49          4 000000EA 00000001  I                 223   235B
TRM5           4 00000130 00000001  I                 246   254B
TRM50A         4 0000047C 00000001  I                 513   504B
TRM51          4 00000496 00000001  I                 526   514B
TRM53          2 000001B2 00000001  I                 288   278B  296B
TRM54          4 000003D0 00000001  I                 453   446B
TRM57          3 00000413 00000001  X X               477   473M
TRM6           4 0000016E 00000001  I                 263   266B
TRM60          6 000004E0 00000001  I                 541   543B
TRM61          4 00000500 00000001  I                 549   563B
TRM62          4 000004FC 00000001  I                 548   565B
TRM7           4 0000017C 00000001  I                 268   258B
TRM7AA         2 0000018C 00000001  H H               273   271M
TRM70          4 00000196 00000001  I                 280   294B
TRM71          4 000001BE 00000001  I                 294   280M
TXTT           1 000009A8 00000001  X X               956   850   923
WAREA         20 00000DE0 00000004  C C              1343  1074M 1093M 1094M 1097M 1103M 1104M 1108  1140  1219  1224
                                                           1260
WDEC           8 00000DD0 00000004  D D              1342  1092M 1093  1102M 1103  1179M 1180  1183M 1184
WDIRET1        4 00000D4E 00000004  I                1301  1027
WDIRET2        4 00000DA6 00000004  I                1325  1262B 1280
WERR           1 00000020           U                2444  1077  1786
WMOVE1         6 00000DBC 00000004  I                1338  1116X 1153X 1207X
WMOVE3         6 00000DC2 00000004  I                1339  1229X
WMOVE4         6 00000DC8 00000004  I                1340  1241X
WORDSEBC       1 00000F64 00000004  U                1505  1174
WORDSISO       1 0000104C 00000004  U                1576  1171
WORKAREA       1 00000000 FFFFFFFE  J                2363   151U 1025U
WSYMBSRC       1 00000FA8 00000004  X X              1387  1182
WSYMBSTK       1 00001006 00000004  X X              1445  1175
ZEROHW         2 00000A50 FFFFFFFE  H H              2744   171
```

```
Register  References (M=modified, B=branch, U=USING, D=DROP, N=index)            X390 3.1.04  2012/08/17 13.13

   0(0)    591M  866M  867   871   873   874   947  1657M 1658  1665M 1666M 1678M 1679  1714M 1719M 1734M 1739M 1753M
          1758M 1793M
   1(1)    375M  377   379   385   394M  486M  489   505M  508M  509   512   515M  518M  519   522   536   538   541
           542M  553   558   562M  587M  592M  602M  860M  861   863   866   872   874M  888M  890M  893M  894   897
           902M  903   904M  907M  908   911   914   915   916   917   919   920   921   922   925N  926   940   943
           947M  948   950N  967   984   985   986   987   988M  990  1026  1251M 1316  1317  1322  1323  1339  1340
          1667M 1671M 1689M 1695N 1696N 1697N 1698N 1699N 1700  1705M 1708  1709  1711M 1712M 1714M 1715M 1718M 1719
          1720M 1725M 1728  1729  1731M 1732M 1734M 1735M 1738M 1739  1740M 1743M 1747  1748  1750M 1751M 1753M 1754M
          1757M 1758  1759M 1769M 1793M
   2(2)    158M  159   171M  176M  190M  191M  208M  227M  243M  254M  256M  257M  259M  266M  268M  270   284M  285
           286M  287N  288M  300M  322   327   331   332   333   340   374   399   406   417   426M  439M  447M  453M
           464M  474M  540M  543M  548M  563M  586M  591   600M  603B  940   941   942N  949N  951N  967   969M  986
           989M 1010U 1653M 1654U 1676M 1677U 1764M 1765U 1793M
   3(3)    177M  178M  179   185M  187M  189   240M  248   253M  260M  261   263   265M  306M  308N  311M  312   314
           315   317M  318M  319M  320   321M  321N  322   334M  335M  345M  350N  354M  355M  356N  360M  361M  362N
           363   372M  373M  395M  398M  399M  399N  400   401   403   416M  419M  420   545M  554M  555   843M  850M
           856M  861   863   876B  914   921   922   923   944M  945M  946   950  1140M 1141M 1145M 1175M 1182M 1186
          1680M 1695  1705  1793M
   4(4)    186M  187   241M  242   244M  245   246   247M  252   255M  262   263   264M  269   308M  309   340M  341
           342   343   344M  350M  351   353   356M  357   359   362M  364   366   371   374M  376   381   382   387
           388   391   392   393M  402M  403   547M  549M  550   848M  855M  880B 1047M 1680M 1766M 1769  1793M
   5(5)    199M  205   212M  219M  223   234M  249M  250M  251   261M  265   269M  270M  271   281M  282   285M  296M
           303M  314M  316M  334   355   361   373  1032M 1033  1049  1091N 1095  1098  1101  1160  1164  1178  1203
          1206  1275  1276M 1278  1330M 1332M 1680M 1793M
   6(6)    168   175   239   301   321   438   491   532   925   968M 1062M 1128  1131  1133  1135  1150  1152  1155M
          1176  1680M 1793M
   7(7)    200M  214M  220M  235M  277M  287M  288   295M  302M  304   308   324   329   337   338   348   350   353
           356   362   375   396  1048M 1049M 1051  1054M 1055M 1057M 1058M 1062  1064  1073  1109  1111  1113  1114
          1151  1308M 1310M 1311M 1313M 1314M 1317  1680M 1793M
   8(8)    154M  242   246   262   282   546M  559M  560M 1680M 1681U 1683D 1696  1743  1793M
   9(9)    201M  204M  207   213M  221M  225M  226   615M  616M  617   619   623M  629M  630   632M  633   636N 1027M
          1028  1056M 1057  1063M 1064M 1065  1066  1068M 1069M 1073N 1125M 1177  1187M 1188  1202M 1204  1219M 1220
          1221M 1222  1223M 1228M 1229  1230N 1233M 1234  1238M 1240M 1241  1274M 1275M 1276  1277M 1278  1312M 1313
          1319M 1321M 1322  1680M 1697  1725  1793M
  10(A)    150U  153M 1050M 1051  1053M 1054  1065M 1069  1073M 1074  1075  1080  1090M 1091M 1092  1101M 1102  1111M
          1115  1126M 1150M 1151M 1151N 1161M 1162  1164M 1176M 1177M 1178M 1178N 1179  1184M 1185M 1186M 1186N 1188
          1190M 1190N 1192  1193M 1197  1206M 1224M 1230M 1280M 1281  1282M 1283  1309M 1310  1320M 1321  1331M 1332
          1338  1339  1340  1680M 1793M
  11(B)    218M  227   233M  248M  251M  252   307M  312   323M  328M  363M  555M  556   617   619M  620   626   634M
           635   636M  637   638   643   644M  645  1112M 1113M 1114M 1115M 1116  1117N 1127M 1152M 1153  1154N 1160M
          1162M 1171M 1174M 1190  1191M 1192M 1196M 1203M 1204M 1205  1207  1218M 1220M 1222M 1226M 1228  1231M 1234M
          1236M 1238  1246M 1247  1680M 1698  1793M
  12(C)   1066M 1067M 1118M 1680M 1699  1793M
  13(D)    151U 1025U 1789M 1792N 1793
  14(E)    172M  180M  192M  228M  272M  289M  325M  368M  421M  427M  440M  454M  510M  520M  533M  535M  537M  539M
           544M  557M  564M  571   573M  574M  575B  581B  601M  641B  842M  848   849M  855   857   858M  859M  868
           870   875M  878M  884   895M  898M  901M  903   909M 1029  1108M 1117M 1141  1143  1144M 1154M 1197  1208
          1218  1266  1268M 1269M 1285M 1287B 1338  1710M 1713M 1714  1730M 1733M 1734  1749M 1752M 1753  1792M 1794B
  15(F)    146B  153   509M  510B  519M  520B  571   572M  573B  574M  595M  598U  611D  865M  867M  868   870M  871M
           872   873M  875   894M  895B  908M  909B  965M  966   968N  969N  984M  990  1029  1225M 1235M 1239M 1240
          1266  1267M 1268B 1269M 1270B 1285M 1292M 1315M 1318M 1708M 1712  1713  1716  1720  1728M 1732  1733  1736
          1740  1747M 1751  1752  1755  1759  1777M 1782M 1785M 1788M
```

| Dsect | Length | Id | Defn | Con | Member |
|---|---|---|---|---|---|
| IHADCB | 00000060 | FFFFFFFF | 1807 | 1 | DCBD |
| WORKAREA | 00000DA8 | FFFFFFFE | 2363 | | PRIMARY INPUT |

```
Con Source       Members                                                                          X390 3.1.04  2012/08/17 13.13

  1 SYS1.MACLIB
             CLOSE    DCB      DCBD     FREEMAIN FREEPOOL IEZREGS  IHBINNRA IHBINNRB IHB01    PUT      RETURN
             SPIE     TIME     WTO      XCTL
  2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLF.ASM
             IEX60000
  4 SYSD.ALGOLF.MACLIB
             IEXCGEN  IEXCHAR  IEXENTRY WORKAREA
  5 SYSD.ALGOLFRT.MACLIB
             DSTABLE
  6 SYS1.AMODGEN
```

| Stmt | Level | Action | Type | Id | Address | Range | Reg | Max | Last | Text |
|---|---|---|---|---|---|---|---|---|---|---|
| 150 | | USING | Ordinary | 00000001 | 00000000 | 00001000 | 10 | 00A0D | 992 | IEX51000,R10 |
| 151 | | USING | Ordinary | FFFFFFFE | 00000000 | 00001000 | 13 | 00AA8 | 919 | WORKAREA,R13 |
| 598 | | USING | Ordinary | 00000001 | 00000576 | 00001000 | 15 | 001CA | 602 | *,R15 |
| 611 | | DROP | | | | | 15 | | | R15 |
| 1010 | | USING | Ordinary | 00000004 | 00000A10 | 00001000 | 2 | 0063C | 1333 | IEX60000,R2 |
| 1025 | | USING | Ordinary | FFFFFFFE | 00000000 | 00001000 | 13 | 00209 | 1789 | WORKAREA,R13 |
| 1654 | | USING | Ordinary | 00000005 | 0000123A | 00001000 | 2 | 00026 | 1664 | *,R2 |
| 1677 | | USING | Ordinary | 00000005 | 00001262 | 00001000 | 2 | 000F0 | 1756 | *,R2 |
| 1681 | | USING | Ordinary | FFFFFFFF | 00000000 | 00001000 | 8 | 00030 | 1682 | IHADCB,R8 |
| 1683 | | DROP | | | | | 8 | | | R8 |
| 1765 | | USING | Ordinary | 00000005 | 00001354 | 00001000 | 2 | 00036 | 1787 | *,R2 |

```
The following statements were flagged -

  SYSD.ALGOLF.ASM(IEX51)
    598(580)

1 statement flagged in this assembly,  4 was the highest severity code.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T1X51    STEPNAME: IEX51    PROCSTEP: X390

Primary input:  lines      1 to    1113 of SYSD.ALGOLF.ASM(IEX51)

SYSLIB library records read: 6972

SYSUT1 work file size: 246584 bytes

SYSUT2 work file size: 544662 bytes

SYSUT3 work file size: 89040 bytes

SYSLIN file records written: 99

TXA000I Return code 4, elapsed time 5.29 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX51000 | 000A0E | 2 |
| IEX60000 | 001234 | 4 |

# IEX51M

LEVEL

V2.M01

 X390 3.1.04 2012/08/17 13.13

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00

Command Line Parameters-  -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
                          -S1//DDN:SYSUT1
                          -S2//DDN:SYSUT2
                          -S3//DDN:SYSUT3
                          -SN//DDN:SYSLIN
                          -SL//DDN:SYSLIB
                          -ST//DDN:SYSPRINT
                          -SH//DDN:SYSPUNCH
                          -SA//DDN:SYSADATA
                          -SM1


Options for this Assembly       Source
-------------------------       -------------------------------
  AControl(ALign,NoLibMac)      (default)
NoAData                         (default)
  AdataLevel(5)                 (default)
NoCompaT                        (default)
  DXref                         (default)
NoEsd                           Command Line
  Flag(0,ALign,ConT,EXlitw,NoImpLen,PUsh,ReCord,NoSUbstr,Using0,NoPage0,NoBrpage0,NoREnt,UsingDup,UsingZero,UsingMult,Ra
2,HLasm,NoTRunc,NoIndeX)        (default)
NoFOld                          (default)
  IDR('X390ASM   3104')         (default)
NoINFO                          Command Line
  LAnguage(EN)                  (default)
  LineCount(101)                Command Line
  List(121)                     (default)
  MsgLevel(0,0)                 Command Line
  MXref(Source)                 (default)
  Object(Omf)                   Command Line
  OPtable(Uni,NoList)           (default)
  PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)
                                Command Line
NoPControl                      (default)
  PRintctl(Asa)                 //DDN:SYSPRINT
  ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                (default)
NoProFile                       (default)
NoRLd                           Command Line
  RXref(NoCr,Gr,NoFr)           (default)
  SiZe(3145728)                 Command Line
NoSUppress                      (default)
  SysadatA(//DDN:SYSADATA)      Command Line
  SysLib(//DDN:SYSLIB)          Command Line
  SysliN(//DDN:SYSLIN)          Command Line
NoSysParm                       (default)
  SysprinT(//DDN:SYSPRINT)      Command Line
  SyspuncH(//DDN:SYSPUNCH)      Command Line
  SystemId('MVS 3.8')           (default)
  SysterM(1)                    Command Line
  Sysut1(//DDN:SYSUT1)          Command Line
  Sysut2(//DDN:SYSUT2)          Command Line
  Sysut3(//DDN:SYSUT3)          Command Line
NoTerm                          Command Line
NoTEst                          (default)
  TypeCheck(Magnitude,Register) (default)
NoUsingLimit                    (default)
  UsingMap                      (default)
  Xref(Short)                   Command Line


DDNAMEs     File/Data Set Names
--------    -------------------
SYSIN       SYSD.ALGOLF.ASM(IEX51M)
SYSLIB      SYS1.MACLIB
            SYSD.TOOLS.MACLIB
            SYSD.ALGOLF.ASM
            SYSD.ALGOLF.MACLIB
            SYSD.ALGOLFRT.MACLIB
            SYS1.AMODGEN
SYSLIN      SYS12230.T131337.RA000.T151M.OBJECT
SYSPRINT    JES2.JOB09280.SO0102
SYSUT1      SYS12230.T131337.RA000.T151M.SYSUT1
SYSUT2      SYS12230.T131337.RA000.T151M.SYSUT2
SYSUT3      SYS12230.T131337.RA000.T151M.SYSUT3
```

```
  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

                                      2 *                                                                00002001
                                      3 *        FUNCTION/OPERATION -                                    00003001
                                      4 *        THIS MODULE CONTAINS MESSAGE TEXTS FOR ALL ERRORS THAT  00004001
                                      5 *        MAY BE DETECTED BY IEX00, IEX50, AND IEX51, AND THE     00005001
                                      6 *        CORRESPONDING ADDRESS TABLE                             00006001
                                      7 *                                                                00007001
                                      8 *        ENTRY POINT - N/A                                       00008001
                                      9 *                                                                00009001
                                     10 *        INPUT - N/A                                             00010001
                                     11 *                                                                00011001
                                     12 *        OUTPUT - N/A                                            00012001
                                     13 *                                                                00013001
                                     14 *        EXTERNAL ROUTINES - N/A                                 00014001
                                     15 *                                                                00015001
                                     16 *        EXITS - NORMAL - N/A                                    00016001
                                     17 *                                                                00017001
                                     18 *        EXITS - ERROR - N/A                                     00018001
                                     19 *                                                                00019001
                                     20 *        TABLES/WORKAREAS - N/A                                  00020001
                                     21 *                                                                00021001
                                     22 *        ATTRIBUTES - N/A                                        00022001
                                     23 *                                                                00023001
                                     24 *        NOTES -                                                 00024001
                                     25 *        AT SYSTEM GENERATION THIS MODULE WILL BE LINKED         00025001
                                     26 *        TOGETHER WITH THE MODULE IEX51 TO FORM THE MODULE IEX51 00026001
                                     27 *                                                                00027001
000000                00000 008FC    28 IEX51M00 CSECT                                                   00028001
                                     29 *                                                                00029001
                                     30          ENTRY IEX51M01                                          00030001
                                     31 *                                                                00031001
                                     32 *        ERROR MESSAGE POOL 3                                    00032001
                                     33 *                                                                00033001
                      00000          34 WEMPOOL3 EQU   *                                                 00034001
                                     35 *                                                                00035001
000000 280500081244001B              36 W160     DC    X'280500081244001B00001B45001C000C1C'             00036001
000011 E2E2C5D8E4C5D5C3              37          DC    CL24'SSEQUENCE   NOT ALLOWED.'                    00037001
                                     38 *                                                                00038001
000029 300500081244001B              39 W161     DC    X'300500081244001B00081B450024000C24'             00039001
00003A E2E2C5D8E4C5D5C3              40          DC    CL32'SSEQUENCE  OPERAND  NOT ALLOWED.'            00040001
                                     41 *                                                                00041001
00005A 2F0500171244002A              42 W162     DC    X'2F0500171244002A00042A45002F00002F'             00042001
00006B E2D6D7C5D9C1D5C4              43          DC    CL31'SOPERAND MISSING BETWEEN  AND .'             00043001
                                     44 *                                                                00044001
00008A 3B0300110C44001E              45 W163     DC    X'3B0300110C44001E001D1E'                         00045001
000095 E2D6D7C5D9C1D5C4              46          DC    CL49'SOPERAND FOLLOWING  MUST BE OF ARITHMETICAL TYPE.'  00046001
                                     47 *                                                                00047001
0000C6 3205001A1244002D              48 W164     DC    X'3205001A1244002D00042D450032000032'             00048001
0000D7 E2D5D640D6D7C5D9              49          DC    CL34'SNO OPERAND ALLOWED BETWEEN  AND .'          00049001
                                     50 *                                                                00050001
0000F9 3500                          51 W165     DC    X'3500'                                           00051001
0000FB E2C5E7D7D9C5E2E2              52          DC    CL52'SEXPRESSIONS BEFORE AND AFTER ''ELSE'''      00052001
00012F D5D6E340C3D6D4D7              53          DC    C'NOT COMPATIBLE.'                                00053001
                                     54 *                                                                00054001
00013E 2100                          55 W166     DC    X'2100'                                           00055001
000140 E2C4C5C3D3C1D9C1              56          DC    CL32'SDECLARATOR IN ILLEGAL POSITION.'            00056001
                                     57 *                                                                00057001
000160 3202440009002909              58 W167     DC    X'3202440009002909'                               00058001
000168 E240C1D5C440D6D7              59          DC    CL43'S AND OPERAND PRECEDING DECLARATOR ILLEGAL.' 00059001
                                     60 *                                                                00060001
000193 330300110C44001E              61 W168     DC    X'330300110C44001E00151E'                         00061001
00019E E2D6D7C5D9C1D5C4              62          DC    CL41'SOPERAND PRECEDING  CANNOT POSSESS VALUE.'   00062001
                                     63 *                                                                00063001
0001C7 2403000F0C44001C              64 W169     DC    X'2403000F0C44001C00081C'                         00064001
0001D2 E2D3C1C2C5D340C6              65          DC    CL26'SLABEL FOLLOWING  ILLEGAL.'                  00065001
                                     66 *                                                                00066001
0001EC 2400                          67 W172     DC    X'2400'                                           00067001
0001EE E2C4C9C6C6C5D9C5              68          DC    CL35'SDIFFERENT TYPES IN LEFT PART LIST.'         00068001
                                     69 *                                                                00069001
000211 3C00                          70 W173     DC    X'3C00'                                           00070001
000213 E3C3D6D4D7C9D3C1              71          DC    CL59'TCOMPILATION UNSUCCESSFUL DUE TO COMPILER OR MACHINX00071001
                                                       E ERROR.'                                         00072001
                                     72 *                                                                00073001
00024E 3C00                          73 W174     DC    X'3C00'                                           00074001
000250 E2D7C1D9C1D4C5E3              74          DC    CL59'SPARAMETERS NOT ALLOWED FOR TYPE PROCEDURE CALLED BX00075001
                                                       Y VALUE.'                                         00076001
                                     75 *                                                                00077001
00028B 360300120C44001E              76 W175     DC    X'360300120C44001E00181E'                         00078001
000296 E2D6D7C5D9C1D5C4              77          DC    CL44'SOPERAND FOLLOWING  MUST BE LABEL OR SWITCH.'  00079001
                                     78 *                                                                00080001
0002C2 230300160C440023              79 W176     DC    X'230300160C440023000023'                         00081001
0002CD E2D6D7C5D9C1D5C4              80          DC    CL25'SOPERAND MISSING BEFORE .'                   00082001
                                     81 *                                                                00083001
0002E6 2703001A0C440027              82 W177     DC    X'2703001A0C440027000027'                         00084001
0002F1 E2D6D7C5D9C1D5C4              83          DC    CL29'SOPERAND NOT ALLOWED BEFORE .'               00085001
                                     84 *                                                                00086001
00030E 3700                          85 W178     DC    X'3700'                                           00087001
000310 E2C9D3D3C5C7C1D3              86          DC    CL54'SILLEGAL OPERAND IN EXPRESSION BEFORE OR AFTER ''ELX00088001
                                                       SE''.'                                            00089001
                                     87 *                                                                00090001
000346 6100                          88 W179     DC    X'6100'                                           00091001
000348 E2D5E4D4C2C5D940              89          DC    CL96'SNUMBER OF SUBSCRIPT EXPRESSIONS DIFFERS FROM DIMENX00092001
                                                       SION IN ARRAY       DECLARATION FOR VARIABLE.'    00093001
                                     90 *                                                                00094001
0003A8 1C00                          91 W180     DC    X'1C00'                                           00095001
0003AA E2C9D5E5C1D3C9C4              92          DC    CL27'SINVALID SWITCH DESIGNATOR.'                 00096001
                                     93 *                                                                00097001
```

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  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                     X390 3.1.04  2012/08/17 13.13

0003C5 2800                          94 W181      DC    X'2800'                                                00098001
0003C7 E2E2E6C9E3C3C840              95           DC    CL39'SSWITCH DESIGNATOR IN ILLEGAL POSITION.'          00099001
                                     96 *                                                                      00100001
0003EE 2E0300110C44001E              97 W182      DC    X'2E0300110C44001E00101E'                              00101001
0003F9 E2D6D7C5D9C1D5C4              98           DC    CL36'SOPERAND FOLLOWING  MUST BE BOOLEAN.'             00102001
                                     99 *                                                                      00103001
00041D 3D0300110C44001E             100 W183      DC    X'3D0300110C44001E001F1E'                              00104001
000428 E2D6D7C5D9C1D5C4             101           DC    CL51'SOPERAND PRECEDING  MUST BE A PROCEDURE IDENTIFIER.X00105001
                                                        '                                                      00106001
                                    102 *                                                                      00107001
00045B 440300110C44001E             103 W184      DC    X'440300110C44001E00261E'                              00108001
000466 E2D6D7C5D9C1D5C4             104           DC    CL58'SOPERAND PRECEDING  MUST BE AN ARRAY OR SWITCH IDENX00109001
                                                        TIFIER.'                                               00110001
                                    105 *                                                                      00111001
0004A0 440300160C440023             106 W185      DC    X'440300160C440023002123'                              00112001
0004AB E2D9C5C1D340D6D7             107           DC    CL58'SREAL OPERAND PRECEDING  NOT ALLOWED FOR INTEGER DIX00113001
                                                        VISION.'                                               00114001
                                    108 *                                                                      00115001
0004E5 3B00                         109 W186      DC    X'3B00'                                                00116001
0004E7 E3E2E8D5E3C1C3E3             110           DC    CL58'TSYNTACTICAL STRUCTURE TOO COMPLICATED. INTERNAL OVX00117001
                                                        ERFLOW.'                                               00118001
                                    111 *                                                                      00119001
000521 2800                         112 W187      DC    X'2800'                                                00120001
000523 E2C9D5C3D6D9D9C5             113           DC    CL39'SINCORRECT NUMBER OF ACTUAL PARAMETERS.'          00121001
                                    114 *                                                                      00122001
00054A 3902003009800004             115 W188      DC    X'3902003009800004'                                    00123001
000552 E2C9D5E5C1D3C9C4             116           DC    CL50'SINVALID ACTUAL PARAMETER FOR STANDARD PROCEDURE.  ' 00124001
                                    117 *                                                                      00125001
000584 3D00                         118 W189      DC    X'3D00'                                                00126001
000586 E2C4C1E3C140E2C5             119           DC    CL60'SDATA SET NUMBER OR FUNCTION OF SYSACT OUT OF ALLOWX00127001
                                                        ED RANGE.'                                             00128001
                                    120 *                                                                      00129001
0005C2 1A00                         121 W190      DC    X'1A00'                                                00130001
0005C4 E2C1E2E2C9C7D5D4             122           DC    CL25'SASSIGNMENT NOT POSSIBLE.'                        00131001
                                    123 *                                                                      00132001
0005DD 2E0300200C44002D             124 W191      DC    X'2E0300200C44002D00012D'                              00133001
0005E8 E2D5D640D6D7C5D9             125           DC    CL36'SNO OPERAND ALLOWED BETWEEN ) AND   .'            00134001
                                    126 *                                                                      00135001
00060C 2D00                         127 W192      DC    X'2D00'                                                00136001
00060E E2C9D5E5C1D3C9C4             128           DC    CL44'SINVALID RIGHT PART IN ASSIGNMENT STATEMENT.'     00137001
                                    129 *                                                                      00138001
00063A 2D00                         130 W193      DC    X'2D00'                                                00139001
00063C E2C9D5C3D6D4D7C1             131           DC    CL44'SINCOMPATIBLE TYPES IN ASSIGNMENT STATEMENT.'     00140001
                                    132 *                                                                      00141001
000668 1502440009000C09             133 W194      DC    X'1502440009000C09'                                    00142001
000670 E240D5D6E340C1D3             134           DC    CL14'S NOT ALLOWED.'                                   00143001
                                    135 *                                                                      00144001
00067E 290300100C44001D             136 W195      DC    X'290300100C44001D000C1D'                              00145001
000689 E2E2C5D8E4C5D5C3             137           DC    CL31'SSEQUENCE OPERAND  NOT ALLOWED.'                  00146001
                                    138 *                                                                      00147001
0006A8 3303001A0C440027             139 W196      DC    X'3303001A0C440027000C27'                              00148001
0006B3 E2C1D9D9C1E840C9             140           DC    CL41'SARRAY IDENTIFIER PRECEDING  NOT ALLOWED.'        00149001
                                    141 *                                                                      00150001
                                    142 *         DIRECTORY MESSAGES                                           00151001
                                    143 *                                                                      00152001
                    006DC           144 W209      EQU   *                                                      00153001
0006DC 460400360FF00000             145 W197      DC    X'460400360FF00000840046000046'                        00154001
0006EA E3C3D6D4D7C9D3C1             146           DC    CL57'TCOMPILATION UNSUCCESSFUL DUE TO PROGRAM INTERRUPT.X00155001
                                                         PSW .'                                                00156001
                                    147 *                                                                      00157001
                    00723           148 W210      EQU   *                                                      00158001
000723 300300270C840030             149 W198      DC    X'300300270C840030000030'                              00159001
00072E E3E4D5D9C5C3D6E5             150           DC    CL38'TUNRECOVERABLE I/O ERROR ON DATA SET .'           00160001
                                    151 *                                                                      00161001
                    00754           152 W211      EQU   *                                                      00162001
000754 D7D9D6C7D9C1D440             153 W199      DC    CL56'PROGRAM INTERRUPT IN ERROR MESSAGE EDITING ROUTINE.X00163001
                                                         PSW '                                                 00164001
                                    154 *                                                                      00165001
                                    155 *         MESSAGES USED BY MORE THAN ONE PHASE                         00166001
                                    156 *                                                                      00167001
                    0078C           157 W212      EQU   *                                                      00168001
00078C 1200                         158 W200      DC    X'1200'                                                00169001
00078E E3E3D6D640D4C1D5             159           DC    CL17'TTOO MANY ERRORS.'                                00170001
                                    160 *                                                                      00171001
                    0079F           161 W213      EQU   *                                                      00172001
00079F 2800                         162 W201      DC    X'2800'                                                00173001
0007A1 E3C9D5E3C5D9D5C1             163           DC    CL39'TINTERNAL OVERFLOW OF IDENTIFIER TABLE.'          00174001
                                    164 *                                                                      00175001
                    007C8           165 W214      EQU   *                                                      00176001
0007C8 3903002D0C84003A             166 W202      DC    X'3903002D0C84003A00003A'                              00177001
0007D3 E2C4C1E3C140E2E3             167           DC    CL48'SDATA STORAGE AREA EXCEEDED, PROGRAM BLOCK NO.  .' 00178001
                                    168 *                                                                      00179001
                    00803           169 W215      EQU   *                                                      00180001
000803 1A00                         170 W203      DC    X'1A00'                                                00181001
000805 E3E2D6E4D9C3C540             171           DC    CL25'TSOURCE PROGRAM TOO LONG.'                        00182001
                                    172 *                                                                      00183001
                    0081E           173 W216      EQU   *                                                      00184001
00081E 2600                         174 W204      DC    X'2600'                                                00185001
000820 E2E3D6D640D4C1D5             175           DC    CL37'STOO MANY LABELS. LABEL NUMBER RESET.'            00186001
                                    176 *                                                                      00187001
000845 000000
000848                              177           DC    0F'0'                                                  00188001
                                    178 *                                                                      00189001
                                    179 *         ADDRESS TABLE FOR WEMPOOL3                                   00190001
                                    180 *                                                                      00191001
                    005C8           181 IEX51M01 EQU   *-640                                                   00192001
```

```
  Active USINGs: None

  Loc  Object Code    Addr1 Addr2  Stmt   Source Statement                                  X390 3.1.04  2012/08/17 13.13

000848 00000000                     182          DC     A(W160)                                                    00193001
00084C 00000029                     183          DC     A(W161)                                                    00194001
000850 0000005A                     184          DC     A(W162)                                                    00195001
000854 0000008A                     185          DC     A(W163)                                                    00196001
000858 000000C6                     186          DC     A(W164)                                                    00197001
00085C 000000F9                     187          DC     A(W165)                                                    00198001
000860 0000013E                     188          DC     A(W166)                                                    00199001
000864 00000160                     189          DC     A(W167)                                                    00200001
000868 00000193                     190          DC     A(W168)                                                    00201001
00086C 000001C7                     191          DC     A(W169)                                                    00202001
000870 00000000                     192          DC     A(0)                                                       00203001
000874 00000000                     193          DC     A(0)                                                       00204001
000878 000001EC                     194          DC     A(W172)                                                    00205001
00087C 00000211                     195          DC     A(W173)                                                    00206001
000880 0000024E                     196          DC     A(W174)                                                    00207001
000884 0000028B                     197          DC     A(W175)                                                    00208001
000888 000002C2                     198          DC     A(W176)                                                    00209001
00088C 000002E6                     199          DC     A(W177)                                                    00210001
000890 0000030E                     200          DC     A(W178)                                                    00211001
000894 00000346                     201          DC     A(W179)                                                    00212001
000898 000003A8                     202          DC     A(W180)                                                    00213001
00089C 000003C5                     203          DC     A(W181)                                                    00214001
0008A0 000003EE                     204          DC     A(W182)                                                    00215001
0008A4 0000041D                     205          DC     A(W183)                                                    00216001
0008A8 0000045B                     206          DC     A(W184)                                                    00217001
0008AC 000004A0                     207          DC     A(W185)                                                    00218001
0008B0 000004E5                     208          DC     A(W186)                                                    00219001
0008B4 00000521                     209          DC     A(W187)                                                    00220001
0008B8 0000054A                     210          DC     A(W188)                                                    00221001
0008BC 00000584                     211          DC     A(W189)                                                    00222001
0008C0 000005C2                     212          DC     A(W190)                                                    00223001
0008C4 000005DD                     213          DC     A(W191)                                                    00224001
0008C8 0000060C                     214          DC     A(W192)                                                    00225001
0008CC 0000063A                     215          DC     A(W193)                                                    00226001
0008D0 00000668                     216          DC     A(W194)                                                    00227001
0008D4 0000067E                     217          DC     A(W195)                                                    00228001
0008D8 000006A8                     218          DC     A(W196)                                                    00229001
0008DC 000006DC                     219          DC     A(W197)                                                    00230001
0008E0 00000723                     220          DC     A(W198)                                                    00231001
0008E4 00000754                     221          DC     A(W199)                                                    00232001
0008E8 0000078C                     222          DC     A(W200)                                                    00233001
0008EC 0000079F                     223          DC     A(W201)                                                    00234001
0008F0 000007C8                     224          DC     A(W202)                                                    00235001
0008F4 00000803                     225          DC     A(W203)                                                    00236001
0008F8 0000081E                     226          DC     A(W204)                                                    00237001
                                    227 *                                                                          00238001
                                    228          END                                                               00239001
```

| Symbol | Length | Value | Id | Type | Asm | Program | Defn | References |
|---|---|---|---|---|---|---|---|---|
| IEX51M01 | 1 | 000005C8 | 00000001 | U | | | 181 | 30 |
| W160 | 17 | 00000000 | 00000001 | X | X | | 36 | 182 |
| W161 | 17 | 00000029 | 00000001 | X | X | | 39 | 183 |
| W162 | 17 | 0000005A | 00000001 | X | X | | 42 | 184 |
| W163 | 11 | 0000008A | 00000001 | X | X | | 45 | 185 |
| W164 | 17 | 000000C6 | 00000001 | X | X | | 48 | 186 |
| W165 | 2 | 000000F9 | 00000001 | X | X | | 51 | 187 |
| W166 | 2 | 0000013E | 00000001 | X | X | | 55 | 188 |
| W167 | 8 | 00000160 | 00000001 | X | X | | 58 | 189 |
| W168 | 11 | 00000193 | 00000001 | X | X | | 61 | 190 |
| W169 | 11 | 000001C7 | 00000001 | X | X | | 64 | 191 |
| W172 | 2 | 000001EC | 00000001 | X | X | | 67 | 194 |
| W173 | 2 | 00000211 | 00000001 | X | X | | 70 | 195 |
| W174 | 2 | 0000024E | 00000001 | X | X | | 73 | 196 |
| W175 | 11 | 0000028B | 00000001 | X | X | | 76 | 197 |
| W176 | 11 | 000002C2 | 00000001 | X | X | | 79 | 198 |
| W177 | 11 | 000002E6 | 00000001 | X | X | | 82 | 199 |
| W178 | 2 | 0000030E | 00000001 | X | X | | 85 | 200 |
| W179 | 2 | 00000346 | 00000001 | X | X | | 88 | 201 |
| W180 | 2 | 000003A8 | 00000001 | X | X | | 91 | 202 |
| W181 | 2 | 000003C5 | 00000001 | X | X | | 94 | 203 |
| W182 | 11 | 000003EE | 00000001 | X | X | | 97 | 204 |
| W183 | 11 | 0000041D | 00000001 | X | X | | 100 | 205 |
| W184 | 11 | 0000045B | 00000001 | X | X | | 103 | 206 |
| W185 | 11 | 000004A0 | 00000001 | X | X | | 106 | 207 |
| W186 | 2 | 000004E5 | 00000001 | X | X | | 109 | 208 |
| W187 | 2 | 00000521 | 00000001 | X | X | | 112 | 209 |
| W188 | 8 | 0000054A | 00000001 | X | X | | 115 | 210 |
| W189 | 2 | 00000584 | 00000001 | X | X | | 118 | 211 |
| W190 | 2 | 000005C2 | 00000001 | X | X | | 121 | 212 |
| W191 | 11 | 000005DD | 00000001 | X | X | | 124 | 213 |
| W192 | 2 | 0000060C | 00000001 | X | X | | 127 | 214 |
| W193 | 2 | 0000063A | 00000001 | X | X | | 130 | 215 |
| W194 | 8 | 00000668 | 00000001 | X | X | | 133 | 216 |
| W195 | 11 | 0000067E | 00000001 | X | X | | 136 | 217 |
| W196 | 11 | 000006A8 | 00000001 | X | X | | 139 | 218 |
| W197 | 14 | 000006DC | 00000001 | X | X | | 145 | 219 |
| W198 | 11 | 00000723 | 00000001 | X | X | | 149 | 220 |
| W199 | 56 | 00000754 | 00000001 | C | C | | 153 | 221 |
| W200 | 2 | 0000078C | 00000001 | X | X | | 158 | 222 |
| W201 | 2 | 0000079F | 00000001 | X | X | | 162 | 223 |
| W202 | 11 | 000007C8 | 00000001 | X | X | | 166 | 224 |
| W203 | 2 | 00000803 | 00000001 | X | X | | 170 | 225 |
| W204 | 2 | 0000081E | 00000001 | X | X | | 174 | 226 |

X390 3.1.04 2012/08/17 13.13

```
No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8    JOBNAME: T151M    STEPNAME: IEX51M    PROCSTEP: X390

Primary input:  lines      1 to     239 of SYSD.ALGOLF.ASM(IEX51M)

SYSLIB library records read: 0

SYSUT1 work file size: 24395 bytes

SYSUT3 work file size: 19120 bytes

SYSLIN file records written: 48

TXA000I Return code 0, elapsed time 0.13 seconds.
```

**INITOBJ - Uninitialized Areas Page No. 1**

| Csect | Rel Addr(hex) | Length(dec) |
|---|---|---|
| IEX51M00 | 0008FC | 4 |

# LINKEDIT

RELEASE

LVL2.1

```
 F64-LEVEL LINKAGE EDITOR OPTIONS SPECIFIED LIST,LET,MAP,NCAL
          DEFAULT OPTION(S) USED -  SIZE=(1015808,516096)
IEW0000            INCLUDE OBJECT(OPTIONS)                                       00046001
IEW0000            INCLUDE OBJECT(IEX00)                                         00047001
IEW0000            ENTRY   IEX00000                                              00048001
IEW0000            ALIAS   ALGOL                                                 00049001
IEW0000            IDENTIFY IEX00000('360SAL531 V02 M01 ALGOL F COMPILER')       00050001
IEW0670             IEX00000            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000            IDENTIFY IEX00001('360SAL531 V02 M01 ALGOL F COMPILER')       00051001
IEW0670             IEX00001            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000            NAME    IEX00(R)                                              00052001


                                                   MODULE MAP


  CONTROL SECTION                      ENTRY

    NAME    ORIGIN  LENGTH               NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX00001      00     DA8
  IEX00000     DA8     4A0
                                       IEX00PIC     E5C    IEX00ED1     F1E    IEX00EDI     F30    IEX00SYN     F3C
                                       IEX00PRI     F8A    IEX00PRT    1074    IEX00LIN    10D4    IEX00PCH    1134
                                       IEX00UT2    1194    IEX00UT3    11EC

 ENTRY ADDRESS      DA8

 TOTAL LENGTH      1248
****IEX00     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****ALGOL     IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.



                                              DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000             INCLUDE OBJECT(IEX10)                                       00053001
IEW0000             ALIAS   IEX10000                                            00054001
IEW0000             ENTRY   IEX10000                                            00055001
IEW0000             IDENTIFY IEX10000('360SAL531 V02 M01 ALGOL F COMPILER')     00056001
IEW0670              IEX10000           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX10001('360SAL531 V02 M01 ALGOL F COMPILER')     00057001
IEW0670              IEX10001           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             NAME    IEX10(R)                                            00058001


                                                    MODULE MAP


  CONTROL SECTION                       ENTRY

    NAME    ORIGIN  LENGTH                NAME    LOCATION     NAME    LOCATION     NAME    LOCATION     NAME    LOCATION
  IEX10000      00     818
  IEX10001     818      18


 ENTRY ADDRESS       00

 TOTAL LENGTH       830
****IEX10     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX10000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.



                                               DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000             INCLUDE OBJECT(IEX11)                                          00059001
IEW0000             ALIAS   IEX11000                                               00060001
IEW0000             ENTRY   IEX11000                                               00061001
IEW0000             IDENTIFY IEX11000('360SAL531 V02 M01 ALGOL F COMPILER')        00062001
IEW0670              IEX11000           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             NAME    IEX11(R)                                               00063001


                                                     MODULE MAP


  CONTROL SECTION                        ENTRY

    NAME    ORIGIN  LENGTH                 NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX11000      00    2E40


 ENTRY ADDRESS       00

 TOTAL LENGTH      2E40
****IEX11     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX11000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.



                                             DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000            INCLUDE OBJECT(IEX20)                                       00064001
IEW0000            ALIAS   IEX20000                                            00065001
IEW0000            ENTRY   IEX20000                                            00066001
IEW0000            IDENTIFY IEX20000('360SAL531 V02 M01 ALGOL F COMPILER')     00067001
IEW0670             IEX20000           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000            NAME    IEX20(R)                                            00068001


                                                    MODULE MAP

  CONTROL SECTION                       ENTRY

    NAME    ORIGIN  LENGTH                NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX20000      00     898


 ENTRY ADDRESS       00

 TOTAL LENGTH       898
****IEX20     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX20000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.


                                             DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000             INCLUDE OBJECT(IEX21)                                         00069001
IEW0000             INCLUDE OBJECT(IEX21M)                                        00070001
IEW0000             ENTRY   IEX21000                                              00071001
IEW0000             ALIAS   IEX21000                                              00072001
IEW0000             IDENTIFY IEX21000('360SAL531 V02 M01 ALGOL F COMPILER')       00073001
IEW0670              IEX21000           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX21M00('360SAL531 V02 M01 ALGOL F COMPILER')       00074001
IEW0670              IEX21M00           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX60000('360SAL531 V02 M01 ALGOL F COMPILER')       00075001
IEW0670              IEX60000           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             NAME    IEX21(R)                                              00076001


                                                 MODULE MAP


  CONTROL SECTION                      ENTRY

    NAME    ORIGIN  LENGTH               NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX21000      00      60
  IEX60000      60     828
  IEX21M00     888     EC0
                                       IEX21M01    1640

 ENTRY ADDRESS       00

 TOTAL LENGTH      1748
****IEX21     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX21000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.


                                        DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000             INCLUDE OBJECT(IEX30)                                  00077001
IEW0000             ALIAS   IEX30000                                       00078001
IEW0000             ENTRY   IEX30000                                       00079001
IEW0000             IDENTIFY IEX30000('360SAL531 V02 M01 ALGOL F COMPILER')    00080001
IEW0670              IEX30000           360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             NAME    IEX30(R)                                       00081001


                                                 MODULE MAP


  CONTROL SECTION                        ENTRY

    NAME    ORIGIN  LENGTH                 NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX30000      00    25F0


 ENTRY ADDRESS       00

 TOTAL LENGTH      25F0
****IEX30     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX30000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.


                                             DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000             INCLUDE OBJECT(IEX31)                                         00082001
IEW0000             INCLUDE OBJECT(IEX31M)                                        00083001
IEW0000             ENTRY   IEX31000                                              00084001
IEW0000             ALIAS   IEX31000                                              00085001
IEW0000             IDENTIFY IEX31000('360SAL531 V02 M01 ALGOL F COMPILER')       00086001
IEW0670              IEX31000            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX31M00('360SAL531 V02 M01 ALGOL F COMPILER')       00087001
IEW0670              IEX31M00            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX60000('360SAL531 V02 M01 ALGOL F COMPILER')       00088001
IEW0670              IEX60000            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             NAME    IEX31(R)                                              00089001


                                                 MODULE MAP

  CONTROL SECTION                       ENTRY

    NAME    ORIGIN  LENGTH                NAME    LOCATION     NAME    LOCATION     NAME    LOCATION     NAME    LOCATION
  IEX31000      00      60
  IEX60000      60     828
  IEX31M00     888     400
                                        IEX31M01      B00

 ENTRY ADDRESS       00

 TOTAL LENGTH       C88
****IEX31     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX31000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.


                                        DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000            INCLUDE OBJECT(IEX40)                                         00090001
IEW0000            ALIAS   IEX40000                                              00091001
IEW0000            ENTRY   IEX40000                                              00092001
IEW0000            IDENTIFY IEX40000('360SAL531 V02 M01 ALGOL F COMPILER')       00093001
IEW0670             IEX40000            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000            NAME    IEX40(R)                                              00094001


                                                  MODULE MAP


  CONTROL SECTION                        ENTRY

    NAME    ORIGIN  LENGTH                 NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX40000      00     AD0


 ENTRY ADDRESS       00

 TOTAL LENGTH       AD0
****IEX40     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX40000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.


                                             DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000             INCLUDE OBJECT(IEX50)                                               00095001
IEW0000             ALIAS   IEX50000                                                    00096001
IEW0000             ENTRY   IEX50000                                                    00097001
IEW0000             IDENTIFY IEX50000('360SAL531 V02 M01 ALGOL F COMPILER')             00098001
IEW0670              IEX50000            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             NAME    IEX50(R)                                                    00099001


                                                     MODULE MAP


  CONTROL SECTION                        ENTRY

    NAME    ORIGIN  LENGTH                 NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX50000      00    6288


 ENTRY ADDRESS       00

 TOTAL LENGTH      6288
****IEX50     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX50000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.



                                              DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```

```
IEW0000             INCLUDE OBJECT(IEX51)                                          00100001
IEW0000             INCLUDE OBJECT(IEX51M)                                         00101001
IEW0000             ENTRY   IEX51000                                               00102001
IEW0000             ALIAS   IEX51000,IEX51002,IEX51ER1,IEX51ER2                    00103001
IEW0000             IDENTIFY IEX51000('360SAL531 V02 M01 ALGOL F COMPILER')        00104001
IEW0670              IEX51000            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX51002('360SAL531 V02 M01 ALGOL F COMPILER')        00105001
IEW0670              IEX51002            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX51M00('360SAL531 V02 M01 ALGOL F COMPILER')        00106001
IEW0670              IEX51M00            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             IDENTIFY IEX60000('360SAL531 V02 M01 ALGOL F COMPILER')        00107001
IEW0670              IEX60000            360SAL531 V02 M01 ALGOL F COMPILER
IEW0000             NAME    IEX51(R)                                               00108001


                                                     MODULE MAP


  CONTROL SECTION                       ENTRY

    NAME    ORIGIN  LENGTH                NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
  IEX51000      00     A10
                                        IEX51ER1     564    IEX51ER2     576
  IEX60000     A10     828
  IEX51002    1238     160
  IEX51M00    1398     900
                                        IEX51M01    1960

 ENTRY ADDRESS       00

 TOTAL LENGTH      1C98
****IEX51     DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET
****IEX51ER2  IS AN ALIAS FOR THIS MEMBER
****IEX51ER1  IS AN ALIAS FOR THIS MEMBER
****IEX51002  IS AN ALIAS FOR THIS MEMBER
****IEX51000  IS AN ALIAS FOR THIS MEMBER
AUTHORIZATION CODE IS         0.



                                            DIAGNOSTIC MESSAGE DIRECTORY
   IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.
```