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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                  COPYRIGHT IBM CORP 1976
                             3         COPY  LOG7A28                ** MAP EC HISTORY **
                             4 ************************************************************************
                             5 *                                                                      *
                             6 *                     ***       PREREQUISITES       ***                *
                             7 *                                                                      *
                             8 *                                NONE                                  *
                             9 *                                                                      *
                            10 ************************************************************************
                            11 *                                                                      *
                            12 *                     ***       MODIFICATIONS       ***                *
                            13 *                                                                      *
                            14 *      CHANGES MADE TO CORPECT ERRORS FOUND WHILE IN TEST              *
                            15 *                                                                      *
                            16 ************************************************************************
                            17 *                                                                      *
                            18 *                     ***     REA'S INCORPORATED    ***                *
                            19 *                                                                      *
                            20 *                                NONE                                  *
                            21 *                                                                      *
                            22 ************************************************************************
                            23 *                                                                      *
                            24 *                     ***    SPECIAL INSTRUCTIONS   ***                *
                            25 *                                                                      *
                            26 *                                NONE                                  *
                            27 *                                                                      *
                            28 ************************************************************************
                            29 *                                                                      *
                            30 *                     ***       E. C. HISTORY       ***                *
                            31 *                                                                      *
                            32 *         DATE 17AUG78  DATE 10JAN79  DATE          DATE              *
                            33 *         E.C. 755391   E.C. 375222   E.C.          E.C.              *
                            34 *                                                                      *
                            35 ************************************************************************
002500                      37 I7A28     START X'2500'              START ADDRESS OF ALL 'I' TYPE PROG
000100                      38 @QUES     EQU   X'0100'              EQUATED VALUE FOR MDI STATEMENT
000101                      39 @FIXT     EQU   X'0101'              EQUATED VALUE FOR MDI STATEMENT
000102                      40 @STOP     EQU   X'0102'              EQUATED VALUE FOR MDI STATEMENT
000200                      41 @GOTO     EQU   X'0200'              EQUATED VALUE FOR MDI STATEMENT
000201                      42 @CALL     EQU   X'0201'              EQUATED VALUE FOR MDI STATEMENT
000300                      43 @INPT     EQU   X'0300'              EQUATED VALUE FOR MDI STATEMENT
000400                      44 @QUXX     EQU   X'0400'              EQUATED VALUE FOR MDI STATEMENT
000500                      45 @TUXX     EQU   X'0500'              EQUATED VALUE FOR MDI STATEMENT
000600                      46 @NVLD     EQU   X'0600'              EQUATED VALUE FOR MDI STATEMENT
000000                      47 EQ        EQU   X'0000'              EQUATE FOR EQUAL
000004                      48 NE        EQU   X'0004'              EQUATE FOR NOT EQUAL
000008                      49 HI        EQU   X'0008'              EQUATE FOR HIGH
00000C                      50 NH        EQU   X'000C'              EQUATE FOR NOT HIGH
000010                      51 LO        EQU   X'0010'              EQUATE FOR LOW
000014                      52 NL        EQU   X'0014'              EQUATE FOR NOT LOW
000010                      53 LT        EQU   X'0010'              EQUATE FOR LESS THAN
00000C                      54 LE        EQU   X'000C'              EQUATE FOR LESS THAN OR EQUAL TO
000008                      55 GT        EQU   X'0008'              EQUATE FOR GREATER THAN
000014                      56 GE        EQU   X'0014'              EQUATE FOR GREATER THAN OR EQUAL TO
000200                      57 ON        EQU   X'0200'              EQUATE FOR ON
000202                      58 OF        EQU   X'0202'              EQUATE FOR OFF
000204                      59 MX        EQU   X'0204'              EQUATE FOR MIXED
000000                      60 EBC       EQU   X'0000'              EQUATE FOR EBCDIC DATA TRANSFER
000001                      61 HEX       EQU   X'0001'              EQUATE FOR HEX DATA TRANSFER
000001                      62 XTRNL     EQU   X'0001'              EQUATE FOR EXTERNAL REFERENCE
000000                      63 INTRNL    EQU   X'0000'              EQUATE FOR INTERNAL REFERENCE
000000                      64 PARM      EQU   X'0000'              EQUATE INDICATING PARAMETER
000001                      65 DA        EQU   X'0001'              EQUATE FOR DEVICE ADDRESS
000002                      66 UA        EQU   X'0002'              EQUATE FOR UNIT ADDRESS
000000                      67 DUMMY     EQU   X'0000'              DUMMY EQUATE
001800                      69 PID       EQU   *-X'0D00'            ADDRESS OF MDI HEADER
000232                      70 PTYPE     EQU   *-X'22CE'            ADDRESS OF PROCESSOR TYPE FIELD
00180C                      71 STEPNUM   EQU   PID+X'000C'          ADDRESS OF DECIMAL STEP NUMBER
00180E                      72 OPWD1     EQU   PID+X'000F'          ADDRESS OF OPTION WORD ONE
001810                      73 OPWD2     EQU   PID+X'0010'          ADDRESS OF OPTION WORD TWO
001818                      74 TUSTATUS  EQU   PID+X'0018'          ADDRESS OF TU STATUS WORD
00181A                      75 TUWORK    EQU   PID+X'001A'          ADDRESS OF TU WORK AREA
00189A                      76 TUPARM1   EQU   PID+X'009A'          ADDRESS OF PARM 1 POINTER
00189C                      77 TUPARM2   EQU   PID+X'009C'          ADDRESS OF PARM 2 POINTER
00189E                      78 TUPARM3   EQU   PID+X'009E'          ADDRESS OF PARM 3 POINTER
0018A0                      79 TUPARM4   EQU   PID+X'00A0'          ADDRESS OF PARM 4 POINTER
0018A2                      80 TUPARM5   EQU   PID+X'00A2'          ADDRESS OF PARM 5 POINTER
0018A4                      81 TUPARM6   EQU   PID+X'00A4'          ADDRESS OF PARM 6 POINTER
0018A6                      82 TUPARM7   EQU   PID+X'00A6'          ADDRESS OF PARM 7 POINTER
0018A8                      83 TUPARM8   EQU   PID+X'00A8'          ADDRESS OF PARM 8 POINTER
0018AA                      84 TUPARM9   EQU   PID+X'00AA'          ADDRESS OF PARM 9 POINTER
0018AC                      85 TUPARM10  EQU   PID+X'00AC'          ADDRESS OF PARM 10 POINTER
0018AE                      86 TUPARM11  EQU   PID+X'00AE'          ADDRESS OF PARM 11 POINTER
0018B0                      87 TUPARM12  EQU   PID+X'00B0'          ADDRESS OF PARM 12 POINTER
0018B2                      88 TUPARM13  EQU   PID+X'00B2'          ADDRESS OF PARM 13 POINTER
0018B4                      89 TUPARM14  EQU   PID+X'00B4'          ADDRESS OF PARM 14 POINTER
0018B6                      90 TUPARM15  EQU   PID+X'00B6'          ADDRESS OF PARM 15 POINTER
0018B8                      91 TUPARM16  EQU   PID+X'00B8'          ADDRESS OF PARM 16 POINTER
0018BA                      92 TUMSGWTR  EQU   PID+X'00BA'          ADDRESS OF -> TO COMMON MSG WRITER
0018BE                      93 TUUA      EQU   PID+X'00BE'          ADDRESS OF UNIT ADDRESS IN EBC
0018C0                      94 TUDA      EQU   PID+X'00C0'          ADDRESS OF DEVICE ADDRESS IN EBC
0018C2                      95 TUBUFF    EQU   PID+X'00C2'          ADDRESS OF LAST USED WORD IN MAP
0018C4                      96 TULAST    EQU   PID+X'00C4'          ADDRESS OF LAST ADDRESSABLE WORD
0018C6                      97 TURESULN  EQU   PID+X'00C6'          ADDRESS OF LENGTH OF TU RESULTS
0018C8                      98 TURESUL   EQU   PID+X'00C8'          ADDRESS OF TU RESULTS FIELD
0018FC                      99 MAPNAME   EQU   PID+X'00FC'          ADDRESS OF MAP NAME FIELD IN HEX
001948                     100 TUINPT    EQU   PID+X'0148'          ADDRESS OF $INPT DATA
00196E                     101 PARMARA   EQU   PID+X'016E'          ADDRESS OF $INPT INPUT AREA
0019B8                     102 @DCADD1   EQU   PID+X'01B8'          MDI POINTER
0019BA                     103 @DCADD2   EQU   PID+X'01BA'          MDI POINTER
0019C4                     104 SUPSTAT   EQU   PID+X'01C4'          ADDRESS OF MDI STATUS
0019D0                     105 DEVADD    EQU   PID+X'01D0'          ADDRESS OF DEVICE ADDRESS TABLE 0
0019DA                     106 DEVADD1   EQU   PID+X'01DA'          ADDRESS OF DEVICE ADDRESS TABLE 1
0019E4                     107 DEVADD2   EQU   PID+X'01E4'          ADDRESS OF DEVICE ADDRESS TABLE 2
0019EE                     108 DEVADD3   EQU   PID+X'01EE'          ADDRESS OF DEVICE ADDRESS TABLE 3
0019F8                     109 DEVADD4   EQU   PID+X'01F8'          ADDRESS OF DEVICE ADDRESS TABLE 4
001A02                     110 DEVADD5   EQU   PID+X'0202'          ADDRESS OF DEVICE ADDRESS TABLE 5
001A0C                     111 DEVADD6   EQU   PID+X'020C'          ADDRESS IF DEVICE ADDRESS TABLE 6
001A16                     112 DEVADD7   EQU   PID+X'0216'          ADDRESS OF DEVICE ADDRESS TABLE 7
                           113         PRINT OFF
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                  COPYRIGHT IBM CORP 1976
002500  309E               198         DC    A(ENTPT)              POINT TO MAP ENTRY POINT TABLE
                           199 ************************************************************************
                           200 ************************************************************************
                           201 **                                                                    **
                           202 **   THE FOLLOWING TABLES ARE USED BY THE MDI SUPERVISOR (D3C00)       **
                           203 **   TO LOCATE THE CORRECT RULE TO INVOKE, TO OBTAIN THE PROPER        **
                           204 **   PARAMETERS TO PASS TO THE TU'S AND TO PASS TO THE OPERATOR        **
                           205 **   THE INDICATED MESSAGE(S). THERE ARE FOUR TABLES USED FOR THIS     **
                           206 **   PURPOSE THEY ARE:                                                **
                           207 **                                                                    **
                           208 **   STEP AND RULE ADDRESS TABLE                                      **
                           209 **        THIS TABLE GIVES THE ADDRESS OF THE RULE TO INVOKE AND      **
                           210 **        THE ASSOCIATED STEP DECIMAL STEP NUMBER OF THAT RULE.       **
                           211 **        ENTRIES ARE AS FOLLOWES                                     **
                           212 **                  A)  AN ADDRESS OF THE RULE DC START AREA          **
                           213 **                  B)  THE STEP NUMBER IN DECIMAL                    **
                           214 **                  C)  AN EQUATE FOR THE STEP NUMBER                 **
                           215 **                                                                    **
                           216 **   RULE INFORMATION TABLE                                           **
                           217 **        THIS TABLE CONTRAINES THE REQUIRED INFORMATION TO EXECUTE    **
                           218 **        THE APPROPRIATE RULE UNDER MDI. EACH RULE HAS ITS OWN       **
                           219 **        UNIQUELY DEFINED AREA INDICATED BELOW.  END OF TABLE IS     **
                           220 **        INDICATED WITH A X'0000' FOR THE RULE EQUATE.               **
                           221 **                                                                    **
                           222 **        $QUES                                                       **
                           223 **              A) RULE EQUATE X'0100'                                **
                           224 **              B) ADDRESS OF THE YES LEG RULE                        **
                           225 **                                                                    **
                           226 **        $FIXT                                                       **
                           227 **              A) RULE EQUATE X'0101'                                **
                           228 **              B) ADDRESS OF MESSAGE TO PRINT                        **
                           229 **                                                                    **
                           230 **        $STOP                                                       **
                           231 **              A) RULE EQUATE X'0102'                                **
                           232 **              B) ADDRESS OF MESSAGE                                 **
                           233 **                                                                    **
                           234 **        $GOTO                                                       **
                           235 **              A) RULE EQUATE X'0200'                                **
                           236 **              B) ADDRESS OF MESSAGE                                 **
                           237 **              C) NAME OF MAP TO GO TO                               **
                           238 **              D) ENTRY POINT WITHIN GO TO MAP TO USE                **
                           239 **              E) INDICATOR FOR EXTERNAL OR INTERNAL REFERENCE       **
                           240 **                                                                    **
                           241 **        $CALL                                                       **
                           242 **              A) RULE EQUATE X'0201'                                **
                           243 **              B) ADDRESS OF MESSAGE                                 **
                           244 **              C) NAME OF MAP TO CALL                                **
                           245 **              D) ENTRY POINT WITHIN CALLED MAP TO USE               **
                           246 **              E) INDICATOR FOR EXTERNAL OR INTERNAL REFERENCE       **
                           247 **                                                                    **
                           248 **        $INPT                                                       **
                           249 **              A) RULE EQUATE X'0300'                                **
                           250 **              B) INPUT TYPE (EBCDIC OR HEX)                         **
                           251 **              C) ADDRESS OF YES LEG RULE                            **
                           252 **              D) DESTINATION LOCATION OF INPUT DATA                 **
                           253 **              E) LENGTH OF INPUT DATA                               **
                           254 **              F) LOWER LIMIT OF GOOD DATA                           **
                           255 **              G) HIGHER LIMIT OF GOOD DATA                          **
                           256 **                                                                    **
                           257 **        $QUXX                                                       **
                           258 **              A) RULE EQUATE X'0400'                                **
                           259 **              B) ADDRESS OF YES LEG RULE                            **
                           260 **              C) TU BRANCH TO ADDRESS (INITIAL)                     **
                           261 **              D) TU BRANCH TO ADDRESS (SECONDARY)                   **
                           262 **              E) LENGTH OF PARAMETER IN BYTES                       **
                           263 **              F) PARAMETER TO PASS TO TU                            **
                           264 **              G) STORE ADDRESS FOR FIRST 8 WORDS OF PARAMETER       **
                           265 **                                                                    **
                           266 **        $TUXX                                                       **
                           267 **              A) RULE EQUATE X'0500'                                **
                           268 **              B) ADDRESS OF YES LEG RULE                            **
                           269 **              C) TU BRANCH TO ADDRESS                               **
                           270 **              D) TYPE OF COMPARE TO MAKE ON RESULTS                 **
                           271 **              E) LENGTH OF COMPARED RESULTS                         **
                           272 **              F) MASK FIELD FOR COMPARE                             **
                           273 **              G) LENGTH OF PARAMETER IN BYTES                       **
                           274 **              H) PARAMETER TO PASS TO THE TU                        **
                           275 **              I) STORE ADDRESS FOR FIRST 8 WORDS OF PARAMETER       **
                           276 **                                                                    **
                           277 **        $NVLD                                                       **
                           278 **              A) RULE EQUATE X'0600'                                **
                           279 **                                                                    **
                           280 **   ENTRY POINT TABLE                                                **
                           281 **        THIS TABLE CONTAINS THE ENTRY POINTS WITHIN THE MAP THAT     **
                           282 **        THE MAP CAN BE ENTERED FROM THESE ENTRY POINTS ARE           **
                           283 **        REFERENCED BY NAME AND ADDRESS. ENTRIES ARE AS FOLLOWES:     **
                           284 **                                                                    **
                           285 **            A) NAME OF ENTRY POINT                                  **
                           286 **            B) ADDRESS OF ENTRY POINT RULE TABLE                    **
                           287 **                                                                    **
                           288 **        THE ENTRY POINT TABLE END IS INDICATED BY A X'0000'         **
                           289 **                                                                    **
                           290 **   MESSAGE TABLE                                                    **
                           291 **        THIS TABLE CONTAINES THE MESSAGE PASSED TO THE OPERATOR     **
                           292 **        VIA THE MDI SUPERVISOR. THE TABLE IS AS FOLLOWES:           **
                           293 **                                                                    **
                           294 **            A) EQUATE FOR START OF MESSAGE BLOCK                    **
                           295 **            B) NUMBER OF LINES OF MESSAGE                           **
                           296 **            C) LENGTH OF FOLLOWING LINE                             **
                           297 **            D) FIRST LINE OF MESSAGE                                **
                           298 **            E) LENGTH OF FOLLOWING LINE                             **
                           299 **            F) SECOND LINE OF MESSAGE                               **
                           300 **            G) ETC.                                                 **
                           301 **                                                                    **
                           302 ************************************************************************
                           303 ************************************************************************
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976
                            308 ************************************************************************
                            309 ************************************************************************
                            310 **                                                                    **
                            311 **                    STEP AND RULE ADDRESS TABLE                     **
                            312 **                                                                    **
                            313 ************************************************************************
                            314 ************************************************************************
002502  27A0                315          DC    AL2(N00001)
002504  0001                316          DC    XL2'0001'
000001                      317 EQN00001 EQU       0001
002506  27B2                318          DC    AL2(N00002)
002508  0002                319          DC    XL2'0002'
000002                      320 EQN00002 EQU       0002
00250A  27CC                321          DC    AL2(N00003)
00250C  0003                322          DC    XL2'0003'
000003                      323 EQN00003 EQU       0003
00250E  27E6                324          DC    AL2(N00004)
002510  0004                325          DC    XL2'0004'
000004                      326 EQN00004 EQU       0004
002512  27FE                327          DC    AL2(N00005)
002514  0005                328          DC    XL2'0005'
000005                      329 EQN00005 EQU       0005
002516  2816                330          DC    AL2(N00006)
002518  0006                331          DC    XL2'0006'
000006                      332 EQN00006 EQU       0006
00251A  2830                333          DC    AL2(N00007)
00251C  0007                334          DC    XL2'0007'
000007                      335 EQN00007 EQU       0007
00251E  284A                336          DC    AL2(N00008)
002520  0008                337          DC    XL2'0008'
000008                      338 EQN00008 EQU       0008
002522  2864                339          DC    AL2(N00009)
002524  0009                340          DC    XL2'0009'
000009                      341 EQN00009 EQU       0009
002526  287C                342          DC    AL2(N00010)
002528  0010                343          DC    XL2'0010'
00000A                      344 EQN00010 EQU       0010
00252A  2880                345          DC    AL2(N00011)
00252C  0011                346          DC    XL2'0011'
00000B                      347 EQN00011 EQU       0011
00252E  289A                348          DC    AL2(N00012)
002530  0012                349          DC    XL2'0012'
00000C                      350 EQN00012 EQU       0012
002532  289E                351          DC    AL2(N00013)
002534  0013                352          DC    XL2'0013'
00000D                      353 EQN00013 EQU       013
002536  28B6                354          DC    AL2(N00014)
002538  0014                355          DC    XL2'0014'
00000E                      356 EQN00014 EQU       0014
00253A  28D0                357          DC    AL2(N00015)
00253C  0015                358          DC    XL2'0015'
00000F                      359 EQN00015 EQU       0015
00253E  28E8                360          DC    AL2(N00016)
002540  0016                361          DC    XL2'0016'
000010                      362 EQN00016 EQU       0016
002542  2900                363          DC    AL2(N00017)
002544  0017                364          DC    XL2'0017'
000011                      365 EQN00017 EQU       0017
002546  2904                366          DC    AL2(N00018)
002548  0018                367          DC    XL2'0018'
000012                      368 EQN00018 EQU       0018
00254A  2908                369          DC    AL2(N00019)
00254C  0019                370          DC    XL2'0019'
000013                      371 EQN00019 EQU       0019
00254E  290C                372          DC    AL2(N00020)
002550  0020                373          DC    XL2'0020'
000014                      374 EQN00020 EQU       0020
002552  2910                375          DC    AL2(N00021)
002554  0021                376          DC    XL2'0021'
000015                      377 EQN00021 EQU       0021
002556  2914                378          DC    AL2(N00022)
002558  0022                379          DC    XL2'0022'
000016                      380 EQN00022 EQU       0022
00255A  292C                381          DC    AL2(N00023)
00255C  0023                382          DC    XL2'0023'
000017                      383 EQN00023 EQU       0023
00255E  2930                384          DC    AL2(N00024)
002560  0024                385          DC    XL2'0024'
000018                      386 EQN00024 EQU       0024
002562  294A                387          DC    AL2(N00025)
002564  0025                388          DC    XL2'0025'
000019                      389 EQN00025 EQU       0025
002566  294E                390          DC    AL2(N00026)
002568  0026                391          DC    XL2'0026'
00001A                      392 EQN00026 EQU       0026
00256A  2952                393          DC    AL2(N00027)
00256C  0027                394          DC    XL2'0027'
00001B                      395 EQN00027 EQU       0027
00256E  2956                396          DC    AL2(N00028)
002570  0028                397          DC    XL2'0028'
00001C                      398 EQN00028 EQU       0028
002572  2968                399          DC    AL2(N00029)
002574  0029                400          DC    XL2'0029'
00001D                      401 EQN00029 EQU       0029
002576  296C                402          DC    AL2(N00030)
002578  0030                403          DC    XL2'0030'
00001E                      404 EQN00030 EQU       0030
00257A  2970                405          DC    AL2(N00031)
00257C  0031                406          DC    XL2'0031'
00001F                      407 EQN00031 EQU       0031
00257E  2988                408          DC    AL2(N00032)
002580  0032                409          DC    XL2'0032'
000020                      410 EQN00032 EQU       0032
002582  29A2                411          DC    AL2(N00033)
002584  0033                412          DC    XL2'0033'
000021                      413 EQN00033 EQU       0033
002586  29B4                414          DC    AL2(N00034)
002588  0034                415          DC    XL2'0034'
000022                      416 EQN00034 EQU       0034
00258A  29CE                417          DC    AL2(N00035)
00258C  0035                418          DC    XL2'0035'
000023                      419 EQN00035 EQU       0035
00258E  29D2                420          DC    AL2(N00036)
002590  0036                421          DC    XL2'0036'
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976
000024                      422 EQN00036 EQU       0036
002592  29E4                423          DC    AL2(N00037)
002594  0037                424          DC    XL2'0037'
000025                      425 EQN00037 EQU       0037
002596  29E8                426          DC    AL2(N00038)
002598  0038                427          DC    XL2'0038'
000026                      428 EQN00038 EQU       0038
00259A  29EC                429          DC    AL2(N00039)
00259C  0039                430          DC    XL2'0039'
000027                      431 EQN00039 EQU       0039
00259E  2A04                432          DC    AL2(N00040)
0025A0  0040                433          DC    XL2'0040'
000028                      434 EQN00040 EQU       0040
0025A2  2A1C                435          DC    AL2(N00041)
0025A4  0041                436          DC    XL2'0041'
000029                      437 EQN00041 EQU       0041
0025A6  2A20                438          DC    AL2(N00042)
0025A8  0042                439          DC    XL2'0042'
00002A                      440 EQN00042 EQU       0042
0025AA  2A24                441          DC    AL2(N00043)
0025AC  0043                442          DC    XL2'0043'
00002B                      443 EQN00043 EQU       0043
0025AE  2A28                444          DC    AL2(N00044)
0025B0  0044                445          DC    XL2'0044'
00002C                      446 EQN00044 EQU       0044
0025B2  2A2C                447          DC    AL2(N00045)
0025B4  0045                448          DC    XL2'0045'
00002D                      449 EQN00045 EQU       0045
0025B6  2A3E                450          DC    AL2(N00046)
0025B8  0046                451          DC    XL2'0046'
00002E                      452 EQN00046 EQU       0046
0025BA  2A42                453          DC    AL2(N00047)
0025BC  0047                454          DC    XL2'0047'
00002F                      455 EQN00047 EQU       0047
0025BE  2A46                456          DC    AL2(N00048)
0025C0  0048                457          DC    XL2'0048'
000030                      458 EQN00048 EQU       0048
0025C2  2A5E                459          DC    AL2(N00049)
0025C4  0049                460          DC    XL2'0049'
000031                      461 EQN00049 EQU       0049
0025C6  2A76                462          DC    AL2(N00050)
0025C8  0050                463          DC    XL2'0050'
000032                      464 EQN00050 EQU       0050
0025CA  2A7A                465          DC    AL2(N00051)
0025CC  0051                466          DC    XL2'0051'
000033                      467 EQN00051 EQU       0051
0025CE  2A92                468          DC    AL2(N00052)
0025D0  0052                469          DC    XL2'0052'
000034                      470 EQN00052 EQU       0052
0025D2  2AAC                471          DC    AL2(N00053)
0025D4  0053                472          DC    XL2'0053'
000035                      473 EQN00053 EQU       0053
0025D6  2AB0                474          DC    AL2(N00054)
0025D8  0054                475          DC    XL2'0054'
000036                      476 EQN00054 EQU       0054
0025DA  2AB4                477          DC    AL2(N00055)
0025DC  0055                478          DC    XL2'0055'
000037                      479 EQN00055 EQU       0055
0025DE  2ACE                480          DC    AL2(N00056)
0025E0  0056                481          DC    XL2'0056'
000038                      482 EQN00056 EQU       0056
0025E2  2AD2                483          DC    AL2(N00057)
0025E4  0057                484          DC    XL2'0057'
000039                      485 EQN00057 EQU       0057
0025E6  2AD6                486          DC    AL2(N00058)
0025E8  0058                487          DC    XL2'0058'
00003A                      488 EQN00058 EQU       0058
0025EA  2ADA                489          DC    AL2(N00059)
0025EC  0059                490          DC    XL2'0059'
00003B                      491 EQN00059 EQU       0059
0025EE  2AF2                492          DC    AL2(N00060)
0025F0  0060                493          DC    XL2'0060'
00003C                      494 EQN00060 EQU       0060
0025F2  2B0A                495          DC    AL2(N00061)
0025F4  0061                496          DC    XL2'0061'
00003D                      497 EQN00061 EQU       0061
0025F6  2B1C                498          DC    AL2(N00062)
0025F8  0062                499          DC    XL2'0062'
00003E                      500 EQN00062 EQU       0062
0025FA  2B20                501          DC    AL2(N00063)
0025FC  0063                502          DC    XL2'0063'
00003F                      503 EQN00063 EQU       0063
0025FE  2B38                504          DC    AL2(N00064)
002600  0064                505          DC    XL2'0064'
000040                      506 EQN00064 EQU       0064
002602  2B3C                507          DC    AL2(N00065)
002604  0065                508          DC    XL2'0065'
000041                      509 EQN00065 EQU       0065
002606  2B40                510          DC    AL2(N00066)
002608  0066                511          DC    XL2'0066'
000042                      512 EQN00066 EQU       0066
00260A  2B58                513          DC    AL2(N00067)
00260C  0067                514          DC    XL2'0067'
000043                      515 EQN00067 EQU       0067
00260E  2B6A                516          DC    AL2(N00068)
002610  0068                517          DC    XL2'0068'
000044                      518 EQN00068 EQU       0068
002612  2B82                519          DC    AL2(N00069)
002614  0069                520          DC    XL2'0069'
000045                      521 EQN00069 EQU       0069
002616  2B86                522          DC    AL2(N00070)
002618  0070                523          DC    XL2'0070'
000046                      524 EQN00070 EQU       0070
00261A  2B8A                525          DC    AL2(N00071)
00261C  0071                526          DC    XL2'0071'
000047                      527 EQN00071 EQU       0071
00261E  2B9C                528          DC    AL2(N00072)
002620  0072                529          DC    XL2'0072'
000048                      530 EQN00072 EQU       0072
002622  2BA0                531          DC    AL2(N00073)
002624  0073                532          DC    XL2'0073'
000049                      533 EQN00073 EQU       0073
002626  2BA4                534          DC    AL2(N00074)
002628  0074                535          DC    XL2'0074'
```

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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT
00004A                      536 EQN00074 EQU      0074
00262A  2BA8                537          DC    AL2(N00075)
00262C  0075                538          DC    XL2'0075'
00004B                      539 EQN00075 EQU      0075
00262E  2BAC                540          DC    AL2(N00076)
002630  0076                541          DC    XL2'0076'
00004C                      542 EQN00076 EQU      0076
002632  2BC6                543          DC    AL2(N00077)
002634  0077                544          DC    XL2'0077'
00004D                      545 EQN00077 EQU      0077
002636  2BDE                546          DC    AL2(N00078)
002638  0078                547          DC    XL2'0078'
00004E                      548 EQN00078 EQU      0078
00263A  2BF6                549          DC    AL2(N00079)
00263C  0079                550          DC    XL2'0079'
00004F                      551 EQN00079 EQU      0079
00263E  2C08                552          DC    AL2(N00080)
002640  0080                553          DC    XL2'0080'
000050                      554 EQN00080 EQU      0080
002642  2C0C                555          DC    AL2(N00081)
002644  0081                556          DC    XL2'0081'
000051                      557 EQN00081 EQU      0081
002646  2C10                558          DC    AL2(N00082)
002648  0082                559          DC    XL2'0082'
000052                      560 EQN00082 EQU      0082
00264A  2C22                561          DC    AL2(N00083)
00264C  0083                562          DC    XL2'0083'
000053                      563 EQN00083 EQU      0083
00264E  2C26                564          DC    AL2(N00084)
002650  0084                565          DC    XL2'0084'
000054                      566 EQN00084 EQU      0084
002652  2C40                567          DC    AL2(N00085)
002654  0085                568          DC    XL2'0085'
000055                      569 EQN00085 EQU      0085
002656  2C44                570          DC    AL2(N00086)
002658  0086                571          DC    XL2'0086'
000056                      572 EQN00086 EQU      0086
00265A  2C5C                573          DC    AL2(N00087)
00265C  0087                574          DC    XL2'0087'
000057                      575 EQN00087 EQU      0087
00265E  2C60                576          DC    AL2(N00088)
002660  0088                577          DC    XL2'0088'
000058                      578 EQN00088 EQU      0088
002662  2C64                579          DC    AL2(N00089)
002664  0089                580          DC    XL2'0089'
000059                      581 EQN00089 EQU      0089
002666  2C7C                582          DC    AL2(N00090)
002668  0090                583          DC    XL2'0090'
00005A                      584 EQN00090 EQU      0090
00266A  2C80                585          DC    AL2(N00091)
00266C  0091                586          DC    XL2'0091'
00005B                      587 EQN00091 EQU      0091
00266E  2C9A                588          DC    AL2(N00092)
002670  0092                589          DC    XL2'0092'
00005C                      590 EQN00092 EQU      0092
002672  2CAC                591          DC    AL2(N00093)
002674  0093                592          DC    XL2'0093'
00005D                      593 EQN00093 EQU      0093
002676  2CB0                594          DC    AL2(N00094)
002678  0094                595          DC    XL2'0094'
00005E                      596 EQN00094 EQU      0094
00267A  2CC2                597          DC    AL2(N00095)
00267C  0095                598          DC    XL2'0095'
00005F                      599 EQN00095 EQU      0095
00267E  2CC6                600          DC    AL2(N00096)
002680  0096                601          DC    XL2'0096'
000060                      602 EQN00096 EQU      0096
002682  2CCA                603          DC    AL2(N00097)
002684  0097                604          DC    XL2'0097'
000061                      605 EQN00097 EQU      0097
002686  2CE4                606          DC    AL2(N00098)
002688  0098                607          DC    XL2'0098'
000062                      608 EQN00098 EQU      0098
00268A  2CE8                609          DC    AL2(N00099)
00268C  0099                610          DC    XL2'0099'
000063                      611 EQN00099 EQU      0099
00268E  2D00                612          DC    AL2(N00100)
002690  0100                613          DC    XL2'0100'
000064                      614 EQN00100 EQU      0100
002692  2D04                615          DC    AL2(N00101)
002694  0101                616          DC    XL2'0101'
000065                      617 EQN00101 EQU      0101
002696  2D08                618          DC    AL2(N00102)
002698  0102                619          DC    XL2'0102'
000066                      620 EQN00102 EQU      0102
00269A  2D20                621          DC    AL2(N00103)
00269C  0103                622          DC    XL2'0103'
000067                      623 EQN00103 EQU      0103
00269E  2D3A                624          DC    AL2(N00104)
0026A0  0104                625          DC    XL2'0104'
000068                      626 EQN00104 EQU      0104
0026A2  2D54                627          DC    AL2(N00105)
0026A4  0105                628          DC    XL2'0105'
000069                      629 EQN00105 EQU      0105
0026A6  2D6C                630          DC    AL2(N00106)
0026A8  0106                631          DC    XL2'0106'
00006A                      632 EQN00106 EQU      0106
0026AA  2D70                633          DC    AL2(N00107)
0026AC  0107                634          DC    XL2'0107'
00006B                      635 EQN00107 EQU      0107
0026AE  2D8A                636          DC    AL2(N00108)
0026B0  0108                637          DC    XL2'0108'
00006C                      638 EQN00108 EQU      0108
0026B2  2D8E                639          DC    AL2(N00109)
0026B4  0109                640          DC    XL2'0109'
00006D                      641 EQN00109 EQU      0109
0026B6  2D92                642          DC    AL2(N00110)
0026B8  0110                643          DC    XL2'0110'
00006E                      644 EQN00110 EQU      0110
0026BA  2DAA                645          DC    AL2(N00111)
0026BC  0111                646          DC    XL2'0111'
00006F                      647 EQN00111 EQU      0111
0026BE  2DC4                648          DC    AL2(N00112)
0026C0  0112                649          DC    XL2'0112'
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT
000070                      650 EQN00112 EQU      0112
0026C2  2DC8                651          DC    AL2(N00113)
0026C4  0113                652          DC    XL2'0113'
000071                      653 EQN00113 EQU      0113
0026C6  2DCC                654          DC    AL2(N00114)
0026C8  0114                655          DC    XL2'0114'
000072                      656 EQN00114 EQU      0114
0026CA  2DE6                657          DC    AL2(N00115)
0026CC  0115                658          DC    XL2'0115'
000073                      659 EQN00115 EQU      0115
0026CE  2DEA                660          DC    AL2(N00116)
0026D0  0116                661          DC    XL2'0116'
000074                      662 EQN00116 EQU      0116
0026D2  2DEE                663          DC    AL2(N00117)
0026D4  0117                664          DC    XL2'0117'
000075                      665 EQN00117 EQU      0117
0026D6  2E06                666          DC    AL2(N00118)
0026D8  0118                667          DC    XL2'0118'
000076                      668 EQN00118 EQU      0118
0026DA  2E1E                669          DC    AL2(N00119)
0026DC  0119                670          DC    XL2'0119'
000077                      671 EQN00119 EQU      0119
0026DE  2E36                672          DC    AL2(N00120)
0026E0  0120                673          DC    XL2'0120'
000078                      674 EQN00120 EQU      0120
0026E2  2E3A                675          DC    AL2(N00121)
0026E4  0121                676          DC    XL2'0121'
000079                      677 EQN00121 EQU      0121
0026E6  2E3E                678          DC    AL2(N00122)
0026E8  0122                679          DC    XL2'0122'
00007A                      680 EQN00122 EQU      0122
0026EA  2E42                681          DC    AL2(N00123)
0026EC  0123                682          DC    XL2'0123'
00007B                      683 EQN00123 EQU      0123
0026EE  2E5C                684          DC    AL2(N00124)
0026F0  0124                685          DC    XL2'0124'
00007C                      686 EQN00124 EQU      0124
0026F2  2E74                687          DC    AL2(N00125)
0026F4  0125                688          DC    XL2'0125'
00007D                      689 EQN00125 EQU      0125
0026F6  2E8C                690          DC    AL2(N00126)
0026F8  0126                691          DC    XL2'0126'
00007E                      692 EQN00126 EQU      0126
0026FA  2EA6                693          DC    AL2(N00127)
0026FC  0127                694          DC    XL2'0127'
00007F                      695 EQN00127 EQU      0127
0026FE  2EAA                696          DC    AL2(N00128)
002700  0128                697          DC    XL2'0128'
000080                      698 EQN00128 EQU      0128
002702  2EAE                699          DC    AL2(N00129)
002704  0129                700          DC    XL2'0129'
000081                      701 EQN00129 EQU      0129
002706  2EB2                702          DC    AL2(N00130)
002708  0130                703          DC    XL2'0130'
000082                      704 EQN00130 EQU      0130
00270A  2EB6                705          DC    AL2(N00131)
00270C  0131                706          DC    XL2'0131'
000083                      707 EQN00131 EQU      0131
00270E  2EBA                708          DC    AL2(N00132)
002710  0132                709          DC    XL2'0132'
000084                      710 EQN00132 EQU      0132
002712  2ED2                711          DC    AL2(N00133)
002714  0133                712          DC    XL2'0133'
000085                      713 EQN00133 EQU      0133
002716  2EEC                714          DC    AL2(N00134)
002718  0134                715          DC    XL2'0134'
000086                      716 EQN00134 EQU      0134
00271A  2EF0                717          DC    AL2(N00135)
00271C  0135                718          DC    XL2'0135'
000087                      719 EQN00135 EQU      0135
00271E  2EF4                720          DC    AL2(N00136)
002720  0136                721          DC    XL2'0136'
000088                      722 EQN00136 EQU      0136
002722  2F0C                723          DC    AL2(N00137)
002724  0137                724          DC    XL2'0137'
000089                      725 EQN00137 EQU      0137
002726  2F26                726          DC    AL2(N00138)
002728  0138                727          DC    XL2'0138'
00008A                      728 EQN00138 EQU      0138
00272A  2F40                729          DC    AL2(N00139)
00272C  0139                730          DC    XL2'0139'
00008B                      731 EQN00139 EQU      0139
00272E  2F44                732          DC    AL2(N00140)
002730  0140                733          DC    XL2'0140'
00008C                      734 EQN00140 EQU      0140
002732  2F5C                735          DC    AL2(N00141)
002734  0141                736          DC    XL2'0141'
00008D                      737 EQN00141 EQU      0141
002736  2F76                738          DC    AL2(N00142)
002738  0142                739          DC    XL2'0142'
00008E                      740 EQN00142 EQU      0142
00273A  2F7A                741          DC    AL2(N00143)
00273C  0143                742          DC    XL2'0143'
00008F                      743 EQN00143 EQU      0143
00273E  2F7E                744          DC    AL2(N00144)
002740  0144                745          DC    XL2'0144'
000090                      746 EQN00144 EQU      0144
002742  2F82                747          DC    AL2(N00145)
002744  0145                748          DC    XL2'0145'
000091                      749 EQN00145 EQU      0145
002746  2F86                750          DC    AL2(N00146)
002748  0146                751          DC    XL2'0146'
000092                      752 EQN00146 EQU      0146
00274A  2F9E                753          DC    AL2(N00147)
00274C  0147                754          DC    XL2'0147'
000093                      755 EQN00147 EQU      0147
00274E  2FA2                756          DC    AL2(N00148)
002750  0148                757          DC    XL2'0148'
000094                      758 EQN00148 EQU      0148
002752  2FA6                759          DC    AL2(N00149)
002754  0149                760          DC    XL2'0149'
000095                      761 EQN00149 EQU      0149
002756  2FB8                762          DC    AL2(N00150)
002758  0150                763          DC    XL2'0150'
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976
000096                      764 EQN00150 EQU     0150
00275A  2FD2                765          DC      AL2(N00151)
00275C  0151                766          DC      XL2'0151'
000097                      767 EQN00151 EQU     0151
00275E  2FEC                768          DC      AL2(N00152)
002760  0152                769          DC      XL2'0152'
000098                      770 EQN00152 EQU     0152
002762  2FF0                771          DC      AL2(N00153)
002764  0153                772          DC      XL2'0153'
000099                      773 EQN00153 EQU     0153
002766  2FF4                774          DC      AL2(N00154)
002768  0154                775          DC      XL2'0154'
00009A                      776 EQN00154 EQU     0154
00276A  3006                777          DC      AL2(N00155)
00276C  0155                778          DC      XL2'0155'
00009B                      779 EQN00155 EQU     0155
00276E  300A                780          DC      AL2(N00156)
002770  0156                781          DC      XL2'0156'
00009C                      782 EQN00156 EQU     0156
002772  300E                783          DC      AL2(N00157)
002774  0157                784          DC      XL2'0157'
00009D                      785 EQN00157 EQU     0157
002776  3026                786          DC      AL2(N00158)
002778  0158                787          DC      XL2'0158'
00009E                      788 EQN00158 EQU     0158
00277A  3040                789          DC      AL2(N00159)
00277C  0159                790          DC      XL2'0159'
00009F                      791 EQN00159 EQU     0159
00277E  3044                792          DC      AL2(N00160)
002780  0160                793          DC      XL2'0160'
0000A0                      794 EQN00160 EQU     0160
002782  3048                795          DC      AL2(N00161)
002784  0161                796          DC      XL2'0161'
0000A1                      797 EQN00161 EQU     0161
002786  3060                798          DC      AL2(N00162)
002788  0162                799          DC      XL2'0162'
0000A2                      800 EQN00162 EQU     0162
00278A  3072                801          DC      AL2(N00163)
00278C  0163                802          DC      XL2'0163'
0000A3                      803 EQN00163 EQU     0163
00278E  3076                804          DC      AL2(N00164)
002790  0164                805          DC      XL2'0164'
0000A4                      806 EQN00164 EQU     0164
002792  3090                807          DC      AL2(N00165)
002794  0165                808          DC      XL2'0165'
0000A5                      809 EQN00165 EQU     0165
002796  3094                810          DC      AL2(N00166)
002798  0166                811          DC      XL2'0166'
0000A6                      812 EQN00166 EQU     0166
00279A  3098                813          DC      AL2(N00167)
00279C  0167                814          DC      XL2'0167'
0000A7                      815 EQN00167 EQU     0167
00279E  0000                816          DC      AL2(DUMMY)
                            817 ********************************************************************************
                            818 ********************************************************************************
                            819 **                                                                            **
                            820 **                          RULE INFORMATION TABLE                            **
                            821 **                                                                            **
                            822 ********************************************************************************
                            823 ********************************************************************************
                            824 N00001  $TUXX T7A10,02,0010,ON,QT=(Q00006),YES=N00149,CT=(C00070)
0027A0  0500                825+N00001  DC     A(@TUXX)
0027A2  2FA6                826+        DC     AL2(N00149)
0027A4  378C                827+        DC     A(T7A10)
0027A6  0200                828+        DC     AL2(ON)
0027A8  0002                829+        DC     AL2(02)
0027AA  0010                830+        DC     X'0010'
                            831+        ALIGN  WORD
0027AC  0000                832+        DC     AL2(0)
0027AE  C1C1                833+        DC     C'AA'
                            834+        ALIGN  WORD
0027B0  196E                835+        DC      AL2(PARMARA)
                            836 N00002  $TUXX T7A02,09,0000000000000008,ON,QT=(Q00007),YES=N00076,  X
0027B2  0500                837+N00002  DC     A(@TUXX)
0027B4  2BAC                838+        DC     AL2(N00076)
0027B6  3248                839+        DC     A(T7A02)
0027B8  0200                840+        DC     AL2(ON)
0027BA  0009                841+        DC     AL2(09)
0027BC  0000000000000008    842+        DC     X'0000000000000008'
0027C5  00                  843+        ALIGN  WORD
0027C6  0000                844+        DC     AL2(0)
0027C8  C1C1                845+        DC     C'AA'
                            846+        ALIGN  WORD
0027CA  196E                847+        DC      AL2(PARMARA)
                            848 N00003  $TUXX T7A02,09,0000000800000000800,OF,QT=(Q00006),YES=N00059,  X
0027CC  0500                849+N00003  DC     A(@TUXX)
0027CE  2ADA                850+        DC     AL2(N00059)
0027D0  3248                851+        DC     A(T7A02)
0027D2  0202                852+        DC     AL2(OF)
0027D4  0009                853+        DC     AL2(09)
0027D6  0000000800000080    854+        DC     X'0000000800000080'
0027DF  00                  855+        ALIGN  WORD
0027E0  0000                856+        DC     AL2(0)
0027E2  C1C1                857+        DC     C'AA'
                            858+        ALIGN  WORD
0027E4  196E                859+        DC      AL2(PARMARA)
                            860 N00004  $TUXX T7A02,07,0000100000001,OF,QT=(Q00006),YES=N00048,  X
0027E6  0500                861+N00004  DC     A(@TUXX)
0027E8  2A46                862+        DC     AL2(N00048)
0027EA  3248                863+        DC     A(T7A02)
0027EC  0202                864+        DC     AL2(OF)
0027EE  0007                865+        DC     AL2(07)
0027F0  0000010000001       866+        DC     X'0000100000001'
0027F7  00                  867+        ALIGN  WORD
0027F8  0000                868+        DC     AL2(0)
0027FA  C1C1                869+        DC     C'AA'
                            870+        ALIGN  WORD
0027FC  196E                871+        DC      AL2(PARMARA)
                            872 N00005  $TUXX T7A02,07,0000400000040,OF,QT=(Q00006),YES=N00031,  X
0027FE  0500                873+N00005  DC     A(@TUXX)
002800  2970                874+        DC     AL2(N00031)
002802  3248                875+        DC     A(T7A02)
002804  0202                876+        DC     AL2(OF)
002806  0007                877+        DC     AL2(07)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976
002808  0000400000000040    878+        DC     X'0000400000000040'
00280F  00                  879+        ALIGN  WORD
002810  0000                880+        DC     AL2(0)
002812  C1C1                881+        DC     C'AA'
                            882+        ALIGN  WORD
002814  196E                883+        DC      AL2(PARMARA)
                            884 N00006  $TUXX T7A02,09,0000000000100000001,OF,QT=(Q00006),YES=N00028,  X
002816  0500                885+N00006  DC     A(@TUXX)
002818  2956                886+        DC     AL2(N00028)
00281A  3248                887+        DC     A(T7A02)
00281C  0202                888+        DC     AL2(OF)
00281E  0009                889+        DC     AL2(09)
002820  0000000010000000    890+        DC     X'0000000010000000'
002829  00                  891+        ALIGN  WORD
00282A  0000                892+        DC     AL2(0)
00282C  C1C1                893+        DC     C'AA'
                            894+        ALIGN  WORD
00282E  196E                895+        DC      AL2(PARMARA)
                            896 N00007  $TUXX T7A02,09,0000004000000004000,OF,QT=(Q00006),YES=N00027,  X
002830  0500                897+N00007  DC     A(@TUXX)
002832  2952                898+        DC     AL2(N00027)
002834  3248                899+        DC     A(T7A02)
002836  0202                900+        DC     AL2(OF)
002838  0009                901+        DC     AL2(09)
00283A  0000004000000004000 902+        DC     X'0000004000000004000'
002843  00                  903+        ALIGN  WORD
002844  0000                904+        DC     AL2(0)
002846  C1C1                905+        DC     C'AA'
                            906+        ALIGN  WORD
002848  196E                907+        DC      AL2(PARMARA)
                            908 N00008  $TUXX T7A02,09,0000008000000008000,OF,QT=(Q00006),YES=N00022,  X
00284A  0500                909+N00008  DC     A(@TUXX)
00284C  2914                910+        DC     AL2(N00022)
00284E  3248                911+        DC     A(T7A02)
002850  0202                912+        DC     AL2(OF)
002852  0009                913+        DC     AL2(09)
002854  0000008000000008000 914+        DC     X'0000008000000008000'
00285D  00                  915+        ALIGN  WORD
00285E  0000                916+        DC     AL2(0)
002860  C1C1                917+        DC     C'AA'
                            918+        ALIGN  WORD
002862  196E                919+        DC      AL2(PARMARA)
                            920 N00009  $TUXX T7A02,07,0000000000040,ON,QT=(Q00007),YES=N00011,  X
002864  0500                921+N00009  DC     A(@TUXX)
002866  2880                922+        DC     AL2(N00011)
002868  3248                923+        DC     A(T7A02)
00286A  0200                924+        DC     AL2(ON)
00286C  0007                925+        DC     AL2(07)
00286E  0000000000040       926+        DC     X'0000000000040'
002875  00                  927+        ALIGN  WORD
002876  0000                928+        DC     AL2(0)
002878  C1C1                929+        DC     C'AA'
                            930+        ALIGN  WORD
00287A  196E                931+        DC      AL2(PARMARA)
                            932 N00010  $FIXT FT=(F00047),GTO=((7A72,F))
00287C  0101                933+N00010  DC     A(@FIXT)
00287E  30A4                934+        DC     A(F00047)
                            935 N00011  $TUXX T7A02,09,0000000000000040,ON,QT=(Q00007),YES=N00013,  X
002880  0500                936+N00011  DC     A(@TUXX)
002882  289E                937+        DC     AL2(N00013)
002884  3248                938+        DC     A(T7A02)
002886  0200                939+        DC     AL2(ON)
002888  0009                940+        DC     AL2(09)
00288A  0000000000000004    941+        DC     X'0000000000000040'
002893  00                  942+        ALIGN  WORD
002894  0000                943+        DC     AL2(0)
002896  C1C1                944+        DC     C'AA'
                            945+        ALIGN  WORD
002898  196E                946+        DC      AL2(PARMARA)
                            947 N00012  $FIXT FT=(F00047),GTO=((7A72,F))
00289A  0101                948+N00012  DC     A(@FIXT)
00289C  30A4                949+        DC     A(F00047)
                            950 N00013  $TUXX T7A02,07,00000800000008,OF,QT=(Q00006),YES=N00021,  X
00289E  0500                951+N00013  DC     A(@TUXX)
0028A0  2910                952+        DC     AL2(N00021)
0028A2  3248                953+        DC     A(T7A02)
0028A4  0202                954+        DC     AL2(OF)
0028A6  0007                955+        DC     AL2(07)
0028A8  000008000000008     956+        DC     X'00000800000008'
0028AF  00                  957+        ALIGN  WORD
0028B0  0000                958+        DC     AL2(0)
0028B2  C1C1                959+        DC     C'AA'
                            960+        ALIGN  WORD
0028B4  196E                961+        DC      AL2(PARMARA)
                            962 N00014  $TUXX T7A02,09,0000002000000200,OF,QT=(Q00006),YES=N00020,  X
0028B6  0500                963+N00014  DC     A(@TUXX)
0028B8  290C                964+        DC     AL2(N00020)
0028BA  3248                965+        DC     A(T7A02)
0028BC  0202                966+        DC     AL2(OF)
0028BE  0009                967+        DC     AL2(09)
0028C0  0000002000000020    968+        DC     X'0000002000000200'
0028C9  00                  969+        ALIGN  WORD
0028CA  0000                970+        DC     AL2(0)
0028CC  C1C1                971+        DC     C'AA'
                            972+        ALIGN  WORD
0028CE  196E                973+        DC      AL2(PARMARA)
                            974 N00015  $TUXX T7A02,07,0008000000080,OF,QT=(Q00006),YES=N00019,  X
0028D0  0500                975+N00015  DC     A(@TUXX)
0028D2  2908                976+        DC     AL2(N00019)
0028D4  3248                977+        DC     A(T7A02)
0028D6  0202                978+        DC     AL2(OF)
0028D8  0007                979+        DC     AL2(07)
0028DA  0008000000080       980+        DC     X'0008000000080'
0028E1  00                  981+        ALIGN  WORD
0028E2  0000                982+        DC     AL2(0)
0028E4  C1C1                983+        DC     C'AA'
                            984+        ALIGN  WORD
0028E6  196E                985+        DC      AL2(PARMARA)
                            986 N00016  $TUXX T7A02,07,0000000000008,ON,QT=(Q00007),YES=N00018,  X
0028E8  0500                987+N00016  DC     A(@TUXX)
0028EA  2904                988+        DC     AL2(N00018)
0028EC  3248                989+        DC     A(T7A02)
0028EE  0200                990+        DC     AL2(ON)
0028F0  0007                991+        DC     AL2(07)
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 LOCTR  OBJECT TEXT       STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

0028F2  00000000000008     992+          DC    X'00000000000008'
0028F9  00                 993+          ALIGN WORD
0028FA  0000               994+          DC    AL2(0)
0028FC  C1C1               995+          DC    C'AA'
                           996+          ALIGN WORD
0028FE  196E               997+          DC     AL2(PARMARA)
                           998 N00017    $FIXT FT=(F00047),GTO=((7A72,F))
002900  0101               999+N00017    DC    A(@FIXT)
002902  30A4              1000+          DC    A(F00047)
                          1001 N00018    $FIXT FT=(F00060),GTO=((7A70,E))
002904  0101              1002+N00018    DC    A(@FIXT)
002906  30B2              1003+          DC    A(F00060)
                          1004 N00019    $FIXT FT=(F00060),GTO=((7A70,E))
002908  0101              1005+N00019    DC    A(@FIXT)
00290A  30B2              1006+          DC    A(F00060)
                          1007 N00020    $FIXT FT=(F00057),GTO=((7A70,B))
00290C  0101              1008+N00020    DC    A(@FIXT)
00290E  30D2              1009+          DC    A(F00057)
                          1010 N00021    $FIXT FT=(F00057),GTO=((7A70,B))
002910  0101              1011+N00021    DC    A(@FIXT)
002912  30D2              1012+          DC    A(F00057)
                          1013 N00022    $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00024,      X
002914  0500              1014+N00022    DC    A(@TUXX)
002916  2930              1015+          DC    AL2(N00024)
002918  3248              1016+          DC    A(T7A02)
00291A  0200              1017+          DC    AL2(ON)
00291C  0007              1018+          DC    AL2(07)
00291E  00000000000020    1019+          DC    X'00000000000020'
002925  00                1020+          ALIGN WORD
002926  0000              1021+          DC    AL2(0)
002928  C1C1              1022+          DC    C'AA'
                          1023+          ALIGN WORD
00292A  196E              1024+          DC     AL2(PARMARA)
                          1025 N00023    $FIXT FT=(F00047),GTO=((7A72,F))
00292C  0101              1026+N00023    DC    A(@FIXT)
00292E  30A4              1027+          DC    A(F00047)
                          1028 N00024    $TUXX T7A02,09,0000000200000000200,OF,QT=(Q00006),YES=N00026,  X
002930  0500              1029+N00024    DC    A(@TUXX)
002932  294E              1030+          DC    AL2(N00026)
002934  3248              1031+          DC    A(T7A02)
002936  0202              1032+          DC    AL2(OF)
002938  0009              1033+          DC    AL2(09)
00293A  00000002000000020 1034+          DC    X'0000000200000000200'
002943  00                1035+          ALIGN WORD
002944  0000              1036+          DC    AL2(0)
002946  C1C1              1037+          DC    C'AA'
                          1038+          ALIGN WORD
002948  196E              1039+          DC     AL2(PARMARA)
                          1040 N00025    $FIXT FT=(F00047),GTO=((7A72,F))
00294A  0101              1041+N00025    DC    A(@FIXT)
00294C  30A4              1042+          DC    A(F00047)
                          1043 N00026    $FIXT FT=(F00057),GTO=((7A70,B))
00294E  0101              1044+N00026    DC    A(@FIXT)
002950  30D2              1045+          DC    A(F00057)
                          1046 N00027    $FIXT FT=(F00047),GTO=((7A72,F))
002952  0101              1047+N00027    DC    A(@FIXT)
002954  30A4              1048+          DC    A(F00047)
                          1049 N00028    $TUXX T7A02,02,0040,ON,QT=(Q00006),YES=N00030,CT=(C00009)
002956  0500              1050+N00028    DC    A(@TUXX)
002958  296C              1051+          DC    AL2(N00030)
00295A  3248              1052+          DC    A(T7A02)
00295C  0200              1053+          DC    AL2(ON)
00295E  0002              1054+          DC    AL2(02)
002960  0040              1055+          DC    X'0040'
                          1056+          ALIGN WORD
002962  0000              1057+          DC    AL2(0)
002964  C1C1              1058+          DC    C'AA'
                          1059+          ALIGN WORD
002966  196E              1060+          DC     AL2(PARMARA)
                          1061 N00029    $FIXT FT=(F00047),GTO=((7A72,F))
002968  0101              1062+N00029    DC    A(@FIXT)
00296A  30A4              1063+          DC    A(F00047)
                          1064 N00030    $FIXT FT=(F00058),GTO=((7A70,C))
00296C  0101              1065+N00030    DC    A(@FIXT)
00296E  30F2              1066+          DC    A(F00058)
                          1067 N00031    $TUXX T7A02,07,00008000000080,OF,QT=(Q00006),YES=N00045,      X
002970  0500              1068+N00031    DC    A(@TUXX)
002972  2A2C              1069+          DC    AL2(N00045)
002974  3248              1070+          DC    A(T7A02)
002976  0202              1071+          DC    AL2(OF)
002978  0007              1072+          DC    AL2(07)
00297A  00008000000080    1073+          DC    X'00008000000080'
002981  00                1074+          ALIGN WORD
002982  0000              1075+          DC    AL2(0)
002984  C1C1              1076+          DC    C'AA'
                          1077+          ALIGN WORD
002986  196E              1078+          DC     AL2(PARMARA)
                          1079 N00032    $TUXX T7A02,09,0000000400000000400,OF,QT=(Q00006),YES=N00044,  X
002988  0500              1080+N00032    DC    A(@TUXX)
00298A  2A28              1081+          DC    AL2(N00044)
00298C  3248              1082+          DC    A(T7A02)
00298E  0202              1083+          DC    AL2(OF)
002990  0009              1084+          DC    AL2(09)
002992  00000004000000040 1085+          DC    X'0000000400000000400'
00299B  00                1086+          ALIGN WORD
00299C  0000              1087+          DC    AL2(0)
00299E  C1C1              1088+          DC    C'AA'
                          1089+          ALIGN WORD
0029A0  196E              1090+          DC     AL2(PARMARA)
                          1091 N00033    $TUXX T7A02,02,0040,ON,QT=(Q00006),YES=N00039,CT=(C00009)
0029A2  0500              1092+N00033    DC    A(@TUXX)
0029A4  29EC              1093+          DC    AL2(N00039)
0029A6  3248              1094+          DC    A(T7A02)
0029A8  0200              1095+          DC    AL2(ON)
0029AA  0002              1096+          DC    AL2(02)
0029AC  0040              1097+          DC    X'0040'
                          1098+          ALIGN WORD
0029AE  0000              1099+          DC    AL2(0)
0029B0  C1C1              1100+          DC    C'AA'
                          1101+          ALIGN WORD
0029B2  196E              1102+          DC     AL2(PARMARA)
                          1103 N00034    $TUXX T7A02,09,0000008000000008000,OF,QT=(Q00006),YES=N00036,  X
0029B4  0500              1104+N00034    DC    A(@TUXX)
0029B6  29D2              1105+          DC    AL2(N00036)
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 LOCTR  OBJECT TEXT       STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

0029B8  3248              1106+          DC    A(T7A02)
0029BA  0202              1107+          DC    AL2(OF)
0029BC  0009              1108+          DC    AL2(09)
0029BE  0000000800000008000 1109+        DC    X'0000008000000008000'
0029C7  00                1110+          ALIGN WORD
0029C8  0000              1111+          DC    AL2(0)
0029CA  C1C1              1112+          DC    C'AA'
                          1113+          ALIGN WORD
0029CC  196E              1114+          DC     AL2(PARMARA)
                          1115 N00035    $FIXT FT=(F00051),GTO=((7A76,F))
0029CE  0101              1116+N00035    DC    A(@FIXT)
0029D0  3112              1117+          DC    A(F00051)
                          1118 N00036    $TUXX T7A02,02,0004,ON,QT=(Q00006),YES=N00038,CT=(C00013)
0029D2  0500              1119+N00036    DC    A(@TUXX)
0029D4  29E8              1120+          DC    AL2(N00038)
0029D6  3248              1121+          DC    A(T7A02)
0029D8  0200              1122+          DC    AL2(ON)
0029DA  0002              1123+          DC    AL2(02)
0029DC  0004              1124+          DC    X'0004'
                          1125+          ALIGN WORD
0029DE  0000              1126+          DC    AL2(0)
0029E0  C1C1              1127+          DC    C'AA'
                          1128+          ALIGN WORD
0029E2  196E              1129+          DC     AL2(PARMARA)
                          1130 N00037    $FIXT FT=(F00047),GTO=((7A72,F))
0029E4  0101              1131+N00037    DC    A(@FIXT)
0029E6  30A4              1132+          DC    A(F00047)
                          1133 N00038    $FIXT FT=(F00049),GTO=((7A72,R))
0029E8  0101              1134+N00038    DC    A(@FIXT)
0029EA  3120              1135+          DC    A(F00049)
                          1136 N00039    $TUXX T7A02,07,00000000000080,ON,QT=(Q00007),YES=N00043,      X
0029EC  0500              1137+N00039    DC    A(@TUXX)
0029EE  2A24              1138+          DC    AL2(N00043)
0029F0  3248              1139+          DC    A(T7A02)
0029F2  0200              1140+          DC    AL2(ON)
0029F4  0007              1141+          DC    AL2(07)
0029F6  00000000000080    1142+          DC    X'00000000000080'
0029FD  00                1143+          ALIGN WORD
0029FE  0000              1144+          DC    AL2(0)
002A00  C1C1              1145+          DC    C'AA'
                          1146+          ALIGN WORD
002A02  196E              1147+          DC     AL2(PARMARA)
                          1148 N00040    $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00042,      X
002A04  0500              1149+N00040    DC    A(@TUXX)
002A06  2A20              1150+          DC    AL2(N00042)
002A08  3248              1151+          DC    A(T7A02)
002A0A  0200              1152+          DC    AL2(ON)
002A0C  0007              1153+          DC    AL2(07)
002A0E  00000000000020    1154+          DC    X'00000000000020'
002A15  00                1155+          ALIGN WORD
002A16  0000              1156+          DC    AL2(0)
002A18  C1C1              1157+          DC    C'AA'
                          1158+          ALIGN WORD
002A1A  196E              1159+          DC     AL2(PARMARA)
                          1160 N00041    $FIXT FT=(F00047),GTO=((7A72,F))
002A1C  0101              1161+N00041    DC    A(@FIXT)
002A1E  30A4              1162+          DC    A(F00047)
                          1163 N00042    $FIXT FT=(F00051),GTO=((7A76,F))
002A20  0101              1164+N00042    DC    A(@FIXT)
002A22  3112              1165+          DC    A(F00051)
                          1166 N00043    $FIXT FT=(F00051),GTO=((7A76,F))
002A24  0101              1167+N00043    DC    A(@FIXT)
002A26  3112              1168+          DC    A(F00051)
                          1169 N00044    $FIXT FT=(F00049),GTO=((7A72,R))
002A28  0101              1170+N00044    DC    A(@FIXT)
002A2A  3120              1171+          DC    A(F00049)
                          1172 N00045    $TUXX T7A02,02,0040,OF,QT=(Q00006),YES=N00047,CT=(C00009)
002A2C  0500              1173+N00045    DC    A(@TUXX)
002A2E  2A42              1174+          DC    AL2(N00047)
002A30  3248              1175+          DC    A(T7A02)
002A32  0202              1176+          DC    AL2(OF)
002A34  0002              1177+          DC    AL2(02)
002A36  0040              1178+          DC    X'0040'
                          1179+          ALIGN WORD
002A38  0000              1180+          DC    AL2(0)
002A3A  C1C1              1181+          DC    C'AA'
                          1182+          ALIGN WORD
002A3C  196E              1183+          DC     AL2(PARMARA)
                          1184 N00046    $FIXT FT=(F00047),GTO=((7A72,F))
002A3E  0101              1185+N00046    DC    A(@FIXT)
002A40  30A4              1186+          DC    A(F00047)
                          1187 N00047    $FIXT FT=(F00060),GTO=((7A70,E))
002A42  0101              1188+N00047    DC    A(@FIXT)
002A44  30B2              1189+          DC    A(F00060)
                          1190 N00048    $TUXX T7A02,07,00008000000080,OF,QT=(Q00006),YES=N00058,      X
002A46  0500              1191+N00048    DC    A(@TUXX)
002A48  2AD6              1192+          DC    AL2(N00058)
002A4A  3248              1193+          DC    A(T7A02)
002A4C  0202              1194+          DC    AL2(OF)
002A4E  0007              1195+          DC    AL2(07)
002A50  00008000000080    1196+          DC    X'00008000000080'
002A57  00                1197+          ALIGN WORD
002A58  0000              1198+          DC    AL2(0)
002A5A  C1C1              1199+          DC    C'AA'
                          1200+          ALIGN WORD
002A5C  196E              1201+          DC     AL2(PARMARA)
                          1202 N00049    $TUXX T7A02,07,00000000000040,ON,QT=(Q00007),YES=N00051,      X
002A5E  0500              1203+N00049    DC    A(@TUXX)
002A60  2A7A              1204+          DC    AL2(N00051)
002A62  3248              1205+          DC    A(T7A02)
002A64  0200              1206+          DC    AL2(ON)
002A66  0007              1207+          DC    AL2(07)
002A68  00000000000040    1208+          DC    X'00000000000040'
002A6F  00                1209+          ALIGN WORD
002A70  0000              1210+          DC    AL2(0)
002A72  C1C1              1211+          DC    C'AA'
                          1212+          ALIGN WORD
002A74  196E              1213+          DC     AL2(PARMARA)
                          1214 N00050    $FIXT FT=(F00047),GTO=((7A72,F))
002A76  0101              1215+N00050    DC    A(@FIXT)
002A78  30A4              1216+          DC    A(F00047)
                          1217 N00051    $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00055,      X
002A7A  0500              1218+N00051    DC    A(@TUXX)
002A7C  2AB4              1219+          DC    AL2(N00055)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

002A7E  3248              1220+          DC    A(T7A02)
002A80  0200              1221+          DC    AL2(ON)
002A82  0007              1222+          DC    AL2(07)
002A84  00000000000020    1223+          DC    X'00000000000020'
002A8B  00                1224+          ALIGN WORD
002A8C  0000              1225+          DC    AL2(0)
002A8E  C1C1              1226+          DC    C'AA'
                          1227+          ALIGN WORD
002A90  196E              1228+          DC     AL2(PARMARA)
                          1229 N00052    $TUXX T7A02,09,00000040000004000,OF,QT=(Q00006),YES=N00054,  X
002A92  0500              1230+N00052    DC    A(@TUXX)
002A94  2AB0              1231+          DC    AL2(N00054)
002A96  3248              1232+          DC    A(T7A02)
002A98  0202              1233+          DC    AL2(OF)
002A9A  0009              1234+          DC    AL2(09)
002A9C  00000040000000400 1235+          DC    X'0000004000000004000'
002AA5  00                1236+          ALIGN WORD
002AA6  0000              1237+          DC    AL2(0)
002AA8  C1C1              1238+          DC    C'AA'
                          1239+          ALIGN WORD
002AAA  196E              1240+          DC     AL2(PARMARA)
                          1241 N00053    $FIXT FT=(F00047),GTO=((7A72,F))
002AAC  0101              1242+N00053    DC    A(@FIXT)
002AAE  30A4              1243+          DC    A(F00047)
                          1244 N00054    $FIXT FT=(F00049),GTO=((7A72,R))
002AB0  0101              1245+N00054    DC    A(@FIXT)
002AB2  3120              1246+          DC    A(F00049)
                          1247 N00055    $TUXX T7A02,09,000000200000002000,OF,QT=(Q00006),YES=N00057,  X
002AB4  0500              1248+N00055    DC    A(@TUXX)
002AB6  2AD2              1249+          DC    AL2(N00057)
002AB8  3248              1250+          DC    A(T7A02)
002ABA  0202              1251+          DC    AL2(OF)
002ABC  0009              1252+          DC    AL2(09)
002ABE  00000020000000200 1253+          DC    X'00000020000000002000'
002AC7  00                1254+          ALIGN WORD
002AC8  0000              1255+          DC    AL2(0)
002ACA  C1C1              1256+          DC    C'AA'
                          1257+          ALIGN WORD
002ACC  196E              1258+          DC     AL2(PARMARA)
                          1259 N00056    $FIXT FT=(F00049),GTO=((7A72,R))
002ACE  0101              1260+N00056    DC    A(@FIXT)
002AD0  3120              1261+          DC    A(F00049)
                          1262 N00057    $FIXT FT=(F00057),GTO=((7A70,B))
002AD2  0101              1263+N00057    DC    A(@FIXT)
002AD4  30D2              1264+          DC    A(F00057)
                          1265 N00058    $FIXT FT=(F00060),GTO=((7A70,E))
002AD6  0101              1266+N00058    DC    A(@FIXT)
002AD8  30B2              1267+          DC    A(F00060)
                          1268 N00059    $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00075,  X
002ADA  0500              1269+N00059    DC    A(@TUXX)
002ADC  2BA8              1270+          DC    AL2(N00075)
002ADE  3248              1271+          DC    A(T7A02)
002AE0  0200              1272+          DC    AL2(ON)
002AE2  0007              1273+          DC    AL2(07)
002AE4  00000000000020    1274+          DC    X'00000000000020'
002AEB  00                1275+          ALIGN WORD
002AEC  0000              1276+          DC    AL2(0)
002AEE  C1C1              1277+          DC    C'AA'
                          1278+          ALIGN WORD
002AF0  196E              1279+          DC     AL2(PARMARA)
                          1280 N00060    $TUXX T7A02,07,00000800000008,OF,QT=(Q00006),YES=N00066,  X
002AF2  0500              1281+N00060    DC    A(@TUXX)
002AF4  2B40              1282+          DC    AL2(N00066)
002AF6  3248              1283+          DC    A(T7A02)
002AF8  0202              1284+          DC    AL2(OF)
002AFA  0007              1285+          DC    AL2(07)
002AFC  00000800000008    1286+          DC    X'00000800000008'
002B03  00                1287+          ALIGN WORD
002B04  0000              1288+          DC    AL2(0)
002B06  C1C1              1289+          DC    C'AA'
                          1290+          ALIGN WORD
002B08  196E              1291+          DC     AL2(PARMARA)
                          1292 N00061    $TUXX T7A02,02,0040,OF,QT=(Q00006),YES=N00063,CT=(C00009)
002B0A  0500              1293+N00061    DC    A(@TUXX)
002B0C  2B20              1294+          DC    AL2(N00063)
002B0E  3248              1295+          DC    A(T7A02)
002B10  0202              1296+          DC    AL2(OF)
002B12  0002              1297+          DC    AL2(02)
002B14  0040              1298+          DC    X'0040'
                          1299+          ALIGN WORD
002B16  0000              1300+          DC    AL2(0)
002B18  C1C1              1301+          DC    C'AA'
                          1302+          ALIGN WORD
002B1A  196E              1303+          DC     AL2(PARMARA)
                          1304 N00062    $FIXT FT=(F00049),GTO=((7A72,R))
002B1C  0101              1305+N00062    DC    A(@FIXT)
002B1E  3120              1306+          DC    A(F00049)
                          1307 N00063    $TUXX T7A02,07,00004000000040,OF,QT=(Q00006),YES=N00065,  X
002B20  0500              1308+N00063    DC    A(@TUXX)
002B22  2B3C              1309+          DC    AL2(N00065)
002B24  3248              1310+          DC    A(T7A02)
002B26  0202              1311+          DC    AL2(OF)
002B28  0007              1312+          DC    AL2(07)
002B2A  00004000000040    1313+          DC    X'00004000000040'
002B31  00                1314+          ALIGN WORD
002B32  0000              1315+          DC    AL2(0)
002B34  C1C1              1316+          DC    C'AA'
                          1317+          ALIGN WORD
002B36  196E              1318+          DC     AL2(PARMARA)
                          1319 N00064    $FIXT FT=(F00054),GTO=((7A76,N))
002B38  0101              1320+N00064    DC    A(@FIXT)
002B3A  312E              1321+          DC    A(F00054)
                          1322 N00065    $FIXT FT=(F00049),GTO=((7A72,R))
002B3C  0101              1323+N00065    DC    A(@FIXT)
002B3E  3120              1324+          DC    A(F00049)
                          1325 N00066    $TUXX T7A02,07,00008000000080,OF,QT=(Q00006),YES=N00074,  X
002B40  0500              1326+N00066    DC    A(@TUXX)
002B42  2BA4              1327+          DC    AL2(N00074)
002B44  3248              1328+          DC    A(T7A02)
002B46  0202              1329+          DC    AL2(OF)
002B48  0007              1330+          DC    AL2(07)
002B4A  00008000000080    1331+          DC    X'00008000000080'
002B51  00                1332+          ALIGN WORD
002B52  0000              1333+          DC    AL2(0)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

002B54  C1C1              1334+          DC    C'AA'
                          1335+          ALIGN WORD
002B56  196E              1336+          DC     AL2(PARMARA)
                          1337 N00067    $TUXX T7A02,02,0040,OF,QT=(Q00006),YES=N00071,CT=(C00009)
002B58  0500              1338+N00067    DC    A(@TUXX)
002B5A  2B8A              1339+          DC    AL2(N00071)
002B5C  3248              1340+          DC    A(T7A02)
002B5E  0202              1341+          DC    AL2(OF)
002B60  0002              1342+          DC    AL2(02)
002B62  0040              1343+          DC    X'0040'
                          1344+          ALIGN WORD
002B64  0000              1345+          DC    AL2(0)
002B66  C1C1              1346+          DC    C'AA'
                          1347+          ALIGN WORD
002B68  196E              1348+          DC     AL2(PARMARA)
                          1349 N00068    $TUXX T7A02,07,00004000000040,OF,QT=(Q00006),YES=N00070,  X
002B6A  0500              1350+N00068    DC    A(@TUXX)
002B6C  2B86              1351+          DC    AL2(N00070)
002B6E  3248              1352+          DC    A(T7A02)
002B70  0202              1353+          DC    AL2(OF)
002B72  0007              1354+          DC    AL2(07)
002B74  00004000000040    1355+          DC    X'00004000000040'
002B7B  00                1356+          ALIGN WORD
002B7C  0000              1357+          DC    AL2(0)
002B7E  C1C1              1358+          DC    C'AA'
                          1359+          ALIGN WORD
002B80  196E              1360+          DC     AL2(PARMARA)
                          1361 N00069    $FIXT FT=(F00049),GTO=((7A72,R))
002B82  0101              1362+N00069    DC    A(@FIXT)
002B84  3120              1363+          DC    A(F00049)
                          1364 N00070    $FIXT FT=(F00047),GTO=((7A72,F))
002B86  0101              1365+N00070    DC    A(@FIXT)
002B88  30A4              1366+          DC    A(F00047)
                          1367 N00071    $TUXX T7A02,02,0004,OF,QT=(Q00006),YES=N00073,CT=(C00013)
002B8A  0500              1368+N00071    DC    A(@TUXX)
002B8C  2BA0              1369+          DC    AL2(N00073)
002B8E  3248              1370+          DC    A(T7A02)
002B90  0202              1371+          DC    AL2(OF)
002B92  0002              1372+          DC    AL2(02)
002B94  0004              1373+          DC    X'0004'
                          1374+          ALIGN WORD
002B96  0000              1375+          DC    AL2(0)
002B98  C1C1              1376+          DC    C'AA'
                          1377+          ALIGN WORD
002B9A  196E              1378+          DC     AL2(PARMARA)
                          1379 N00072    $FIXT FT=(F00047),GTO=((7A72,F))
002B9C  0101              1380+N00072    DC    A(@FIXT)
002B9E  30A4              1381+          DC    A(F00047)
                          1382 N00073    $FIXT FT=(F00049),GTO=((7A72,R))
002BA0  0101              1383+N00073    DC    A(@FIXT)
002BA2  3120              1384+          DC    A(F00049)
                          1385 N00074    $FIXT FT=(F00049),GTO=((7A72,R))
002BA4  0101              1386+N00074    DC    A(@FIXT)
002BA6  3120              1387+          DC    A(F00049)
                          1388 N00075    $FIXT FT=(F00053),GTO=((7A76,M))
002BA8  0101              1389+N00075    DC    A(@FIXT)
002BAA  313C              1390+          DC    A(F00053)
                          1391 N00076    $TUXX T7A02,09,000000008000000080,OF,QT=(Q00006),YES=N00102,  X
002BAC  0500              1392+N00076    DC    A(@TUXX)
002BAE  2D08              1393+          DC    AL2(N00102)
002BB0  3248              1394+          DC    A(T7A02)
002BB2  0202              1395+          DC    AL2(OF)
002BB4  0009              1396+          DC    AL2(09)
002BB6  00000000800000008 1397+          DC    X'0000000080000000080'
002BBF  00                1398+          ALIGN WORD
002BC0  0000              1399+          DC    AL2(0)
002BC2  C1C1              1400+          DC    C'AA'
                          1401+          ALIGN WORD
002BC4  196E              1402+          DC     AL2(PARMARA)
                          1403 N00077    $TUXX T7A02,07,00004000000040,OF,QT=(Q00006),YES=N00089,  X
002BC6  0500              1404+N00077    DC    A(@TUXX)
002BC8  2C64              1405+          DC    AL2(N00089)
002BCA  3248              1406+          DC    A(T7A02)
002BCC  0202              1407+          DC    AL2(OF)
002BCE  0007              1408+          DC    AL2(07)
002BD0  00004000000040    1409+          DC    X'00004000000040'
002BD7  00                1410+          ALIGN WORD
002BD8  0000              1411+          DC    AL2(0)
002BDA  C1C1              1412+          DC    C'AA'
                          1413+          ALIGN WORD
002BDC  196E              1414+          DC     AL2(PARMARA)
                          1415 N00078    $TUXX T7A02,07,00000100000001,OF,QT=(Q00006),YES=N00082,  X
002BDE  0500              1416+N00078    DC    A(@TUXX)
002BE0  2C10              1417+          DC    AL2(N00082)
002BE2  3248              1418+          DC    A(T7A02)
002BE4  0202              1419+          DC    AL2(OF)
002BE6  0007              1420+          DC    AL2(07)
002BE8  00000100000001    1421+          DC    X'00000100000001'
002BEF  00                1422+          ALIGN WORD
002BF0  0000              1423+          DC    AL2(0)
002BF2  C1C1              1424+          DC    C'AA'
                          1425+          ALIGN WORD
002BF4  196E              1426+          DC     AL2(PARMARA)
                          1427 N00079    $TUXX T7A02,02,0005,OF,QT=(Q00006),YES=N00081,CT=(C00014)
002BF6  0500              1428+N00079    DC    A(@TUXX)
002BF8  2C0C              1429+          DC    AL2(N00081)
002BFA  3248              1430+          DC    A(T7A02)
002BFC  0202              1431+          DC    AL2(OF)
002BFE  0002              1432+          DC    AL2(02)
002C00  0005              1433+          DC    X'0005'
                          1434+          ALIGN WORD
002C02  0000              1435+          DC    AL2(0)
002C04  C1C1              1436+          DC    C'AA'
                          1437+          ALIGN WORD
002C06  196E              1438+          DC     AL2(PARMARA)
                          1439 N00080    $FIXT FT=(F00063),GTO=((7A70,J))
002C08  0101              1440+N00080    DC    A(@FIXT)
002C0A  314A              1441+          DC    A(F00063)
                          1442 N00081    $FIXT FT=(F00057),GTO=((7A70,B))
002C0C  0101              1443+N00081    DC    A(@FIXT)
002C0E  30D2              1444+          DC    A(F00057)
                          1445 N00082    $TUXX T7A02,02,0040,OF,QT=(Q00006),YES=N00084,CT=(C00009)
002C10  0500              1446+N00082    DC    A(@TUXX)
002C12  2C26              1447+          DC    AL2(N00084)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

002C14  3248              1448+          DC    A(T7A02)
002C16  0202              1449+          DC    AL2(0F)
002C18  0002              1450+          DC    AL2(02)
002C1A  0040              1451+          DC    X'0040'
                          1452+          ALIGN WORD
002C1C  0000              1453+          DC    AL2(0)
002C1E  C1C1              1454+          DC    C'AA'
                          1455+          ALIGN WORD
002C20  196E              1456+          DC     AL2(PARMARA)
                          1457 N00083    $FIXT FT=(F00049),GTO=((7A72,R))
                          1458+N00083    DC    A(@FIXT)
002C22  0101              1459+          DC    A(F00049)
002C24  3120              1460 N00084    $TUXX T7A02,09,00000004000000400,OF,QT=(Q00006),YES=N00086,  X
                          1461+N00084    DC    A(@TUXX)
002C26  0500              1462+          DC    AL2(N00086)
002C28  2C44              1463+          DC    A(T7A02)
002C2A  3248              1464+          DC    AL2(0F)
002C2C  0202              1465+          DC    AL2(09)
002C2E  0009              1466+          DC    X'00000004000000400'
002C30  00000004000000040 1467+          ALIGN WORD
002C39  00                1468+          DC    AL2(0)
002C3A  0000              1469+          DC    C'AA'
002C3C  C1C1              1470+          ALIGN WORD
                          1471+          DC     AL2(PARMARA)
002C3E  196E              1472 N00085    $FIXT FT=(F00045),GTO=((7A72,B))
                          1473+N00085    DC    A(@FIXT)
002C40  0101              1474+          DC    A(F00045)
002C42  3184              1475 N00086    $TUXX T7A02,07,00000000000080,ON,QT=(Q00007),YES=N00088,      X
                          1476+N00086    DC    A(@TUXX)
002C44  0500              1477+          DC    AL2(N00088)
002C46  2C60              1478+          DC    A(T7A02)
002C48  3248              1479+          DC    AL2(ON)
002C4A  0200              1480+          DC    AL2(07)
002C4C  0007              1481+          DC    X'00000000000080'
002C4E  00000000000080    1482+          ALIGN WORD
002C55  00                1483+          DC    AL2(0)
002C56  0000              1484+          DC    C'AA'
002C58  C1C1              1485+          ALIGN WORD
                          1486+          DC     AL2(PARMARA)
002C5A  196E              1487 N00087    $FIXT FT=(F00050),GTO=((7A72,X))
                          1488+N00087    DC    A(@FIXT)
002C5C  0101              1489+          DC    A(F00050)
002C5E  3192              1490 N00088    $FIXT FT=(F00045),GTO=((7A72,B))
                          1491+N00088    DC    A(@FIXT)
002C60  0101              1492+          DC    A(F00045)
002C62  3184              1493 N00089    $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00091,      X
                          1494+N00089    DC    A(@TUXX)
002C64  0500              1495+          DC    AL2(N00091)
002C66  2C80              1496+          DC    A(T7A02)
002C68  3248              1497+          DC    AL2(ON)
002C6A  0200              1498+          DC    AL2(07)
002C6C  0007              1499+          DC    X'00000000000020'
002C6E  00000000000020    1500+          ALIGN WORD
002C75  00                1501+          DC    AL2(0)
002C76  0000              1502+          DC    C'AA'
002C78  C1C1              1503+          ALIGN WORD
                          1504+          DC     AL2(PARMARA)
002C7A  196E              1505 N00090    $FIXT FT=(F00045),GTO=((7A72,B))
                          1506+N00090    DC    A(@FIXT)
002C7C  0101              1507+          DC    A(F00045)
002C7E  3184              1508 N00091    $TUXX T7A02,09,00000004000000400,OF,QT=(Q00006),YES=N00097,  X
                          1509+N00091    DC    A(@TUXX)
002C80  0500              1510+          DC    AL2(N00097)
002C82  2CCA              1511+          DC    A(T7A02)
002C84  3248              1512+          DC    AL2(0F)
002C86  0202              1513+          DC    AL2(09)
002C88  0009              1514+          DC    X'00000004000000400'
002C8A  00000004000000040 1515+          ALIGN WORD
002C93  00                1516+          DC    AL2(0)
002C94  0000              1517+          DC    C'AA'
002C96  C1C1              1518+          ALIGN WORD
                          1519+          DC     AL2(PARMARA)
002C98  196E              1520 N00092    $TUXX T7A02,02,0040,OF,QT=(Q00006),YES=N00094,CT=(C00009)
                          1521+N00092    DC    A(@TUXX)
002C9A  0500              1522+          DC    AL2(N00094)
002C9C  2CB0              1523+          DC    A(T7A02)
002C9E  3248              1524+          DC    AL2(0F)
002CA0  0202              1525+          DC    AL2(02)
002CA2  0002              1526+          DC    X'0040'
002CA4  0040              1527+          ALIGN WORD
                          1528+          DC    AL2(0)
002CA6  0000              1529+          DC    C'AA'
002CA8  C1C1              1530+          ALIGN WORD
                          1531+          DC     AL2(PARMARA)
002CAA  196E              1532 N00093    $FIXT FT=(F00049),GTO=((7A72,P))
                          1533+N00093    DC    A(@FIXT)
002CAC  0101              1534+          DC    A(F00049)
002CAE  3120              1535 N00094    $TUXX T7A02,02,0004,OF,QT=(Q00006),YES=N00096,CT=(C00013)
                          1536+N00094    DC    A(@TUXX)
002CB0  0500              1537+          DC    AL2(N00096)
002CB2  2CC6              1538+          DC    A(T7A02)
002CB4  3248              1539+          DC    AL2(0F)
002CB6  0202              1540+          DC    AL2(02)
002CB8  0002              1541+          DC    X'0004'
002CBA  0004              1542+          ALIGN WORD
002CBC  0000              1543+          DC    AL2(0)
002CBE  C1C1              1544+          DC    C'AA'
                          1545+          ALIGN WORD
002CC0  196E              1546+          DC     AL2(PARMARA)
                          1547 N00095    $FIXT FT=(F00057),GTO=((7A70,B))
                          1548+N00095    DC    A(@FIXT)
002CC2  0101              1549+          DC    A(F00057)
002CC4  30D2              1550 N00096    $FIXT FT=(F00060),GTO=((7A70,E))
                          1551+N00096    DC    A(@FIXT)
002CC6  0101              1552+          DC    A(F00060)
002CC8  30B2              1553 N00097    $TUXX T7A02,09,00000008000000800,OF,QT=(Q00006),YES=N00099,  X
                          1554+N00097    DC    A(@TUXX)
002CCA  0500              1555+          DC    AL2(N00099)
002CCC  2CE8              1556+          DC    A(T7A02)
002CCE  3248              1557+          DC    AL2(0F)
002CD0  0202              1558+          DC    AL2(09)
002CD2  0009              1559+          DC    X'00000008000000800'
002CD4  00000008000000080 1560+          ALIGN WORD
002CDD  00                1561+          DC    AL2(0)
002CDE  0000
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

002CE0  C1C1              1562+          DC    C'AA'
                          1563+          ALIGN WORD
002CE2  196E              1564+          DC     AL2(PARMARA)
                          1565 N00098    $FIXT FT=(F00047),GTO=((7A72,F))
                          1566+N00098    DC    A(@FIXT)
002CE4  0101              1567+          DC    A(F00047)
002CE6  30A4              1568 N00099    $TUXX T7A02,07,00000100000001,OF,QT=(Q00006),YES=N00101,      X
                          1569+N00099    DC    A(@TUXX)
002CE8  0500              1570+          DC    AL2(N00101)
002CEA  2D04              1571+          DC    A(T7A02)
002CEC  3248              1572+          DC    AL2(0F)
002CEE  0202              1573+          DC    AL2(07)
002CF0  0007              1574+          DC    X'00000100000001'
002CF2  00000100000001    1575+          ALIGN WORD
002CF9  00                1576+          DC    AL2(0)
002CFA  0000              1577+          DC    C'AA'
002CFC  C1C1              1578+          ALIGN WORD
                          1579+          DC     AL2(PARMARA)
002CFE  196E              1580 N00100    $FIXT FT=(F00051),GTO=((7A76,F))
                          1581+N00100    DC    A(@FIXT)
002D00  0101              1582+          DC    A(F00051)
002D02  3112              1583 N00101    $FIXT FT=(F00047),GTO=((7A72,F))
                          1584+N00101    DC    A(@FIXT)
002D04  0101              1585+          DC    A(F00047)
002D06  30A4              1586 N00102    $TUXX T7A02,07,00004000000040,OF,QT=(Q00006),YES=N00132,      X
                          1587+N00102    DC    A(@TUXX)
002D08  0500              1588+          DC    AL2(N00132)
002D0A  2EBA              1589+          DC    A(T7A02)
002D0C  3248              1590+          DC    AL2(0F)
002D0E  0202              1591+          DC    AL2(07)
002D10  0007              1592+          DC    X'00004000000040'
002D12  00004000000040    1593+          ALIGN WORD
002D19  00                1594+          DC    AL2(0)
002D1A  0000              1595+          DC    C'AA'
002D1C  C1C1              1596+          ALIGN WORD
                          1597+          DC     AL2(PARMARA)
002D1E  196E              1598 N00103    $TUXX T7A02,09,00000004000000400,OF,QT=(Q00006),YES=N00117,  X
                          1599+N00103    DC    A(@TUXX)
002D20  0500              1600+          DC    AL2(N00117)
002D22  2DEE              1601+          DC    A(T7A02)
002D24  3248              1602+          DC    AL2(0F)
002D26  0202              1603+          DC    AL2(09)
002D28  0009              1604+          DC    X'00000004000000400'
002D2A  00000004000000040 1605+          ALIGN WORD
002D33  00                1606+          DC    AL2(0)
002D34  0000              1607+          DC    C'AA'
002D36  C1C1              1608+          ALIGN WORD
                          1609+          DC     AL2(PARMARA)
002D38  196E              1610 N00104    $TUXX T7A02,09,00000080000000800,OF,QT=(Q00006),YES=N00110,  X
                          1611+N00104    DC    A(@TUXX)
002D3A  0500              1612+          DC    AL2(N00110)
002D3C  2D92              1613+          DC    A(T7A02)
002D3E  3248              1614+          DC    AL2(0F)
002D40  0202              1615+          DC    AL2(09)
002D42  0009              1616+          DC    X'00000080000000800'
002D44  00000080000000800 1617+          ALIGN WORD
002D4D  00                1618+          DC    AL2(0)
002D4E  0000              1619+          DC    C'AA'
002D50  C1C1              1620+          ALIGN WORD
                          1621+          DC     AL2(PARMARA)
002D52  196E              1622 N00105    $TUXX T7A02,07,00008000000080,OF,QT=(Q00006),YES=N00107,      X
                          1623+N00105    DC    A(@TUXX)
002D54  0500              1624+          DC    AL2(N00107)
002D56  2D70              1625+          DC    A(T7A02)
002D58  3248              1626+          DC    AL2(0F)
002D5A  0202              1627+          DC    AL2(07)
002D5C  0007              1628+          DC    X'00008000000080'
002D5E  00008000000080    1629+          ALIGN WORD
002D65  00                1630+          DC    AL2(0)
002D66  0000              1631+          DC    C'AA'
002D68  C1C1              1632+          ALIGN WORD
                          1633+          DC     AL2(PARMARA)
002D6A  196E              1634 N00106    $FIXT FT=(F00045),GTO=((7A72,B))
                          1635+N00106    DC    A(@FIXT)
002D6C  0101              1636+          DC    A(F00045)
002D6E  3184              1637 N00107    $TUXX T7A02,09,00000010000001000,OF,QT=(Q00006),YES=N00109,  X
                          1638+N00107    DC    A(@TUXX)
002D70  0500              1639+          DC    AL2(N00109)
002D72  2D9E              1640+          DC    A(T7A02)
002D74  3248              1641+          DC    AL2(0F)
002D76  0202              1642+          DC    AL2(09)
002D78  0009              1643+          DC    X'00000010000001000'
002D7A  00000010000001000 1644+          ALIGN WORD
002D83  00                1645+          DC    AL2(0)
002D84  0000              1646+          DC    C'AA'
002D86  C1C1              1647+          ALIGN WORD
                          1648+          DC     AL2(PARMARA)
002D88  196E              1649 N00108    $FIXT FT=(F00045),GTO=((7A72,B))
                          1650+N00108    DC    A(@FIXT)
002D8A  0101              1651+          DC    A(F00045)
002D8C  3184              1652 N00109    $FIXT FT=(F00060),GTO=((7A70,E))
                          1653+N00109    DC    A(@FIXT)
002D8E  0101              1654+          DC    A(F00060)
002D90  30B2              1655 N00110    $TUXX T7A02,07,00000100000001,OF,QT=(Q00006),YES=N00114,      X
                          1656+N00110    DC    A(@TUXX)
002D92  0500              1657+          DC    AL2(N00114)
002D94  2DCC              1658+          DC    A(T7A02)
002D96  3248              1659+          DC    AL2(0F)
002D98  0202              1660+          DC    AL2(07)
002D9A  0007              1661+          DC    X'00000100000001'
002D9C  00000100000001    1662+          ALIGN WORD
002DA3  00                1663+          DC    AL2(0)
002DA4  0000              1664+          DC    C'AA'
002DA6  C1C1              1665+          ALIGN WORD
                          1666+          DC     AL2(PARMARA)
002DA8  196E              1667 N00111    $TUXX T7A02,09,00000010000001000,OF,QT=(Q00006),YES=N00113,  X
                          1668+N00111    DC    A(@TUXX)
002DAA  0500              1669+          DC    AL2(N00113)
002DAC  2DC8              1670+          DC    A(T7A02)
002DAE  3248              1671+          DC    AL2(0F)
002DB0  0202              1672+          DC    AL2(09)
002DB2  0009              1673+          DC    X'00000010000001000'
002DB4  00000010000001000 1674+          ALIGN WORD
002DBD  00                1675+          DC    AL2(0)
002DBE  0000
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

002DC0  C1C1              1676+          DC    C'AA'
                          1677+          ALIGN WORD
002DC2  196E              1678+          DC     AL2(PARMARA)
                          1679 N00112    $FIXT FT=(F00060),GTO=((7A70,E))
002DC4  0101              1680+N00112    DC    A(@FIXT)
002DC6  30B2              1681+          DC    A(F00060)
                          1682 N00113    $FIXT FT=(F00059),GTO=((7A70,D))
002DC8  0101              1683+N00113    DC    A(@FIXT)
002DCA  31A0              1684+          DC    A(F00059)
                          1685 N00114    $TUXX T7A02,09,00000000000000004,ON,QT=(Q00007),YES=N00116,  X
002DCC  0500              1686+N00114    DC    A(@TUXX)
002DCE  2DEA              1687+          DC    AL2(N00116)
002DD0  3248              1688+          DC    A(T7A02)
002DD2  0200              1689+          DC    AL2(ON)
002DD4  0009              1690+          DC    AL2(09)
002DD6  00000000000000000 1691+          DC    X'0000000000000004'
002DDF  00                1692+          ALIGN WORD
002DE0  0000              1693+          DC    AL2(0)
002DE2  C1C1              1694+          DC    C'AA'
                          1695+          ALIGN WORD
002DE4  196E              1696+          DC     AL2(PARMARA)
                          1697 N00115    $FIXT FT=(F00045),GTO=((7A72,B))
002DE6  0101              1698+N00115    DC    A(@FIXT)
002DE8  3184              1699+          DC    A(F00045)
                          1700 N00116    $FIXT FT=(F00045),GTO=((7A72,B))
002DEA  0101              1701+N00116    DC    A(@FIXT)
002DEC  3184              1702+          DC    A(F00045)
                          1703 N00117    $TUXX T7A02,07,00000100000001,OF,QT=(Q00006),YES=N00123,      X
002DEE  0500              1704+N00117    DC    A(@TUXX)
002DF0  2E42              1705+          DC    AL2(N00123)
002DF2  3248              1706+          DC    A(T7A02)
002DF4  0202              1707+          DC    AL2(OF)
002DF6  0007              1708+          DC    AL2(07)
002DF8  00000100000001    1709+          DC    X'00000100000001'
002DFF  00                1710+          ALIGN WORD
002E00  0000              1711+          DC    AL2(0)
002E02  C1C1              1712+          DC    C'AA'
                          1713+          ALIGN WORD
002E04  196E              1714+          DC     AL2(PARMARA)
                          1715 N00118    $TUXX T7A02,07,00000000000080,ON,QT=(Q00007),YES=N00122,      X
002E06  0500              1716+N00118    DC    A(@TUXX)
002E08  2E3E              1717+          DC    AL2(N00122)
002E0A  3248              1718+          DC    A(T7A02)
002E0C  0200              1719+          DC    AL2(ON)
002E0E  0007              1720+          DC    AL2(07)
002E10  00000000000080    1721+          DC    X'00000000000080'
002E17  00                1722+          ALIGN WORD
002E18  0000              1723+          DC    AL2(0)
002E1A  C1C1              1724+          DC    C'AA'
                          1725+          ALIGN WORD
002E1C  196E              1726+          DC     AL2(PARMARA)
                          1727 N00119    $TUXX T7A02,07,00000000000040,ON,QT=(Q00007),YES=N00121,      X
002E1E  0500              1728+N00119    DC    A(@TUXX)
002E20  2E3A              1729+          DC    AL2(N00121)
002E22  3248              1730+          DC    A(T7A02)
002E24  0200              1731+          DC    AL2(ON)
002E26  0007              1732+          DC    AL2(07)
002E28  00000000000040    1733+          DC    X'00000000000040'
002E2F  00                1734+          ALIGN WORD
002E30  0000              1735+          DC    AL2(0)
002E32  C1C1              1736+          DC    C'AA'
                          1737+          ALIGN WORD
002E34  196E              1738+          DC     AL2(PARMARA)
                          1739 N00120    $FIXT FT=(F00055),GTO=((7A76,R))
002E36  0101              1740+N00120    DC    A(@FIXT)
002E38  31C0              1741+          DC    A(F00055)
                          1742 N00121    $FIXT FT=(F00060),GTO=((7A70,E))
002E3A  0101              1743+N00121    DC    A(@FIXT)
002E3C  30B2              1744+          DC    A(F00060)
                          1745 N00122    $FIXT FT=(F00060),GTO=((7A70,E))
002E3E  0101              1746+N00122    DC    A(@FIXT)
002E40  30B2              1747+          DC    A(F00060)
                          1748 N00123    $TUXX T7A02,09,00000010000000001000,OF,QT=(Q00006),YES=N00131,  X
002E42  0500              1749+N00123    DC    A(@TUXX)
002E44  2EB6              1750+          DC    AL2(N00131)
002E46  3248              1751+          DC    A(T7A02)
002E48  0202              1752+          DC    AL2(OF)
002E4A  0009              1753+          DC    AL2(09)
002E4C  00000010000000100 1754+          DC    X'0000001000000001000'
002E55  00                1755+          ALIGN WORD
002E56  0000              1756+          DC    AL2(0)
002E58  C1C1              1757+          DC    C'AA'
                          1758+          ALIGN WORD
002E5A  196E              1759+          DC     AL2(PARMARA)
                          1760 N00124    $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00130,      X
002E5C  0500              1761+N00124    DC    A(@TUXX)
002E5E  2EB2              1762+          DC    AL2(N00130)
002E60  3248              1763+          DC    A(T7A02)
002E62  0200              1764+          DC    AL2(ON)
002E64  0007              1765+          DC    AL2(07)
002E66  00000000000020    1766+          DC    X'00000000000020'
002E6D  00                1767+          ALIGN WORD
002E6E  0000              1768+          DC    AL2(0)
002E70  C1C1              1769+          DC    C'AA'
                          1770+          ALIGN WORD
002E72  196E              1771+          DC     AL2(PARMARA)
                          1772 N00125    $TUXX T7A02,07,00000000000080,ON,QT=(Q00007),YES=N00129,      X
002E74  0500              1773+N00125    DC    A(@TUXX)
002E76  2EAE              1774+          DC    AL2(N00129)
002E78  3248              1775+          DC    A(T7A02)
002E7A  0200              1776+          DC    AL2(ON)
002E7C  0007              1777+          DC    AL2(07)
002E7E  00000000000080    1778+          DC    X'00000000000080'
002E85  00                1779+          ALIGN WORD
002E86  0000              1780+          DC    AL2(0)
002E88  C1C1              1781+          DC    C'AA'
                          1782+          ALIGN WORD
002E8A  196E              1783+          DC     AL2(PARMARA)
                          1784 N00126    $TUXX T7A02,09,00000040000000004000,OF,QT=(Q00006),YES=N00128,  X
002E8C  0500              1785+N00126    DC    A(@TUXX)
002E8E  2EAA              1786+          DC    AL2(N00128)
002E90  3248              1787+          DC    A(T7A02)
002E92  0202              1788+          DC    AL2(OF)
002E94  0009              1789+          DC    AL2(09)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

002E96  00000040000000400 1790+          DC    X'0000004000000004000'
002E9F  00                1791+          ALIGN WORD
002EA0  0000              1792+          DC    AL2(0)
002EA2  C1C1              1793+          DC    C'AA'
                          1794+          ALIGN WORD
002EA4  196E              1795+          DC     AL2(PARMARA)
                          1796 N00127    $FIXT FT=(F00057),GTO=((7A70,B))
002EA6  0101              1797+N00127    DC    A(@FIXT)
002EA8  30D2              1798+          DC    A(F00057)
                          1799 N00128    $FIXT FT=(F00059),GTO=((7A70,D))
002EAA  0101              1800+N00128    DC    A(@FIXT)
002EAC  31A0              1801+          DC    A(F00059)
                          1802 N00129    $FIXT FT=(F00059),GTO=((7A70,D))
002EAE  0101              1803+N00129    DC    A(@FIXT)
002EB0  31A0              1804+          DC    A(F00059)
                          1805 N00130    $FIXT FT=(F00048),GTO=((7A72,G))
002EB2  0101              1806+N00130    DC    A(@FIXT)
002EB4  31CE              1807+          DC    A(F00048)
                          1808 N00131    $FIXT FT=(F00048),GTO=((7A72,G))
002EB6  0101              1809+N00131    DC    A(@FIXT)
002EB8  31CE              1810+          DC    A(F00048)
                          1811 N00132    $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00136,      X
002EBA  0500              1812+N00132    DC    A(@TUXX)
002EBC  2EF4              1813+          DC    AL2(N00136)
002EBE  3248              1814+          DC    A(T7A02)
002EC0  0200              1815+          DC    AL2(ON)
002EC2  0007              1816+          DC    AL2(07)
002EC4  00000000000020    1817+          DC    X'00000000000020'
002ECB  00                1818+          ALIGN WORD
002ECC  0000              1819+          DC    AL2(0)
002ECE  C1C1              1820+          DC    C'AA'
                          1821+          ALIGN WORD
002ED0  196E              1822+          DC     AL2(PARMARA)
                          1823 N00133    $TUXX T7A02,09,00000010000000001000,OF,QT=(Q00006),YES=N00135,  X
002ED2  0500              1824+N00133    DC    A(@TUXX)
002ED4  2EF0              1825+          DC    AL2(N00135)
002ED6  3248              1826+          DC    A(T7A02)
002ED8  0202              1827+          DC    AL2(OF)
002EDA  0009              1828+          DC    AL2(09)
002EDC  00000010000000100 1829+          DC    X'0000001000000001000'
002EE5  00                1830+          ALIGN WORD
002EE6  0000              1831+          DC    AL2(0)
002EE8  C1C1              1832+          DC    C'AA'
                          1833+          ALIGN WORD
002EEA  196E              1834+          DC     AL2(PARMARA)
                          1835 N00134    $FIXT FT=(F00045),GTO=((7A72,B))
002EEC  0101              1836+N00134    DC    A(@FIXT)
002EEE  3184              1837+          DC    A(F00045)
                          1838 N00135    $FIXT FT=(F00060),GTO=((7A70,E))
002EF0  0101              1839+N00135    DC    A(@FIXT)
002EF2  30B2              1840+          DC    A(F00060)
                          1841 N00136    $TUXX T7A02,07,00000100000001,OF,QT=(Q00006),YES=N00146,      X
002EF4  0500              1842+N00136    DC    A(@TUXX)
002EF6  2FB6              1843+          DC    AL2(N00146)
002EF8  3248              1844+          DC    A(T7A02)
002EFA  0202              1845+          DC    AL2(OF)
002EFC  0007              1846+          DC    AL2(07)
002EFE  00000100000001    1847+          DC    X'00000100000001'
002F05  00                1848+          ALIGN WORD
002F06  0000              1849+          DC    AL2(0)
002F08  C1C1              1850+          DC    C'AA'
                          1851+          ALIGN WORD
002F0A  196E              1852+          DC     AL2(PARMARA)
                          1853 N00137    $TUXX T7A02,09,00000010000000001000,OF,QT=(Q00006),YES=N00145,  X
002F0C  0500              1854+N00137    DC    A(@TUXX)
002F0E  2F82              1855+          DC    AL2(N00145)
002F10  3248              1856+          DC    A(T7A02)
002F12  0202              1857+          DC    AL2(OF)
002F14  0009              1858+          DC    AL2(09)
002F16  00000010000000100 1859+          DC    X'0000001000000001000'
002F1F  00                1860+          ALIGN WORD
002F20  0000              1861+          DC    AL2(0)
002F22  C1C1              1862+          DC    C'AA'
                          1863+          ALIGN WORD
002F24  196E              1864+          DC     AL2(PARMARA)
                          1865 N00138    $TUXX T7A02,09,00000008000000800,OF,QT=(Q00006),YES=N00140,  X
002F26  0500              1866+N00138    DC    A(@TUXX)
002F28  2F44              1867+          DC    AL2(N00140)
002F2A  3248              1868+          DC    A(T7A02)
002F2C  0202              1869+          DC    AL2(OF)
002F2E  0009              1870+          DC    AL2(09)
002F30  00000008000000080 1871+          DC    X'0000000800000800'
002F39  00                1872+          ALIGN WORD
002F3A  0000              1873+          DC    AL2(0)
002F3C  C1C1              1874+          DC    C'AA'
                          1875+          ALIGN WORD
002F3E  196E              1876+          DC     AL2(PARMARA)
                          1877 N00139    $FIXT FT=(F00047),GTO=((7A72,F))
002F40  0101              1878+N00139    DC    A(@FIXT)
002F42  30A4              1879+          DC    A(F00047)
                          1880 N00140    $TUXX T7A02,07,00000000000080,ON,QT=(Q00007),YES=N00144,      X
002F44  0500              1881+N00140    DC    A(@TUXX)
002F46  2F7E              1882+          DC    AL2(N00144)
002F48  3248              1883+          DC    A(T7A02)
002F4A  0200              1884+          DC    AL2(ON)
002F4C  0007              1885+          DC    AL2(07)
002F4E  00000000000080    1886+          DC    X'00000000000080'
002F55  00                1887+          ALIGN WORD
002F56  0000              1888+          DC    AL2(0)
002F58  C1C1              1889+          DC    C'AA'
                          1890+          ALIGN WORD
002F5A  196E              1891+          DC     AL2(PARMARA)
                          1892 N00141    $TUXX T7A02,09,00000040000000400,OF,QT=(Q00006),YES=N00143,  X
002F5C  0500              1893+N00141    DC    A(@TUXX)
002F5E  2F7A              1894+          DC    AL2(N00143)
002F60  3248              1895+          DC    A(T7A02)
002F62  0202              1896+          DC    AL2(OF)
002F64  0009              1897+          DC    AL2(09)
002F66  00000004000000040 1898+          DC    X'0000000400000000400'
002F6F  00                1899+          ALIGN WORD
002F70  0000              1900+          DC    AL2(0)
002F72  C1C1              1901+          DC    C'AA'
                          1902+          ALIGN WORD
002F74  196E              1903+          DC     AL2(PARMARA)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

                           1904 N00142   $FIXT FT=(F00060),GTO=((7A70,E))
002F76  0101               1905+N00142   DC    A(@FIXT)
002F78  30B2               1906+         DC    A(F00060)
                           1907 N00143   $FIXT FT=(F00051),GTO=((7A76,F))
002F7A  0101               1908+N00143   DC    A(@FIXT)
002F7C  3112               1909+         DC    A(F00051)
                           1910 N00144   $FIXT FT=(F00060),GTO=((7A70,E))
002F7E  0101               1911+N00144   DC    A(@FIXT)
002F80  30B2               1912+         DC    A(F00060)
                           1913 N00145   $FIXT FT=(F00047),GTO=((7A72,F))
002F82  0101               1914+N00145   DC    A(@FIXT)
002F84  30A4               1915+         DC    A(F00047)
                           1916 N00146   $TUXX T7A02,07,00008000000080,OF,QT=(Q00006),YES=N00148,      X
002F86  0500               1917+N00146   DC    A(@TUXX)
002F88  2FA2               1918+         DC    AL2(N00148)
002F8A  3248               1919+         DC    A(T7A02)
002F8C  0202               1920+         DC    AL2(OF)
002F8E  0007               1921+         DC    AL2(07)
002F90  00008000000080     1922+         DC    X'00008000000080'
002F97  00                 1923+         ALIGN WORD
002F98  0000               1924+         DC    AL2(0)
002F9A  C1C1               1925+         DC    C'AA'
                           1926+         ALIGN WORD
002F9C  196E               1927+         DC     AL2(PARMARA)
                           1928 N00147   $FIXT FT=(F00051),GTO=((7A76,F))
002F9E  0101               1929+N00147   DC    A(@FIXT)
002FA0  3112               1930+         DC    A(F00051)
                           1931 N00148   $FIXT FT=(F00045),GTO=((7A72,B))
002FA2  0101               1932+N00148   DC    A(@FIXT)
002FA4  3184               1933+         DC    A(F00045)
                           1934 N00149   $TUXX T7A02,02,0002,OF,QT=(Q00006),YES=N00157,CT=(C00014)
002FA6  0500               1935+N00149   DC    A(@TUXX)
002FA8  300E               1936+         DC    AL2(N00157)
002FAA  3248               1937+         DC    A(T7A02)
002FAC  0202               1938+         DC    AL2(OF)
002FAE  0002               1939+         DC    AL2(02)
002FB0  0002               1940+         DC    X'0002'
                           1941+         ALIGN WORD
002FB2  0000               1942+         DC    AL2(0)
002FB4  C1C1               1943+         DC    C'AA'
                           1944+         ALIGN WORD
002FB6  196E               1945+         DC     AL2(PARMARA)
                           1946 N00150   $TUXX T7A02,09,00000008000000080,OF,QT=(Q00006),YES=N00154,   X
002FB8  0500               1947+N00150   DC    A(@TUXX)
002FBA  2FF4               1948+         DC    AL2(N00154)
002FBC  3248               1949+         DC    A(T7A02)
002FBE  0202               1950+         DC    AL2(OF)
002FC0  0009               1951+         DC    AL2(09)
002FC2  00000000800000008  1952+         DC    X'0000000800000080'
002FCA  00                 1953+         ALIGN WORD
002FCC  0000               1954+         DC    AL2(0)
002FCE  C1C1               1955+         DC    C'AA'
                           1956+         ALIGN WORD
002FD0  196E               1957+         DC     AL2(PARMARA)
                           1958 N00151   $TUXX T7A02,09,00000080000000008000,OF,QT=(Q00006),YES=N00153,   X
002FD2  0500               1959+N00151   DC    A(@TUXX)
002FD4  2FF0               1960+         DC    AL2(N00153)
002FD6  3248               1961+         DC    A(T7A02)
002FD8  0202               1962+         DC    AL2(OF)
002FDA  0009               1963+         DC    AL2(09)
002FDC  00000080000000800  1964+         DC    X'0000008000000008000'
002FE5  00                 1965+         ALIGN WORD
002FE6  0000               1966+         DC    AL2(0)
002FE8  C1C1               1967+         DC    C'AA'
                           1968+         ALIGN WORD
002FEA  196E               1969+         DC     AL2(PARMARA)
                           1970 N00152   $FIXT FT=(P00063),GTO=((7A70,J))
002FEC  0101               1971+N00152   DC    A(@FIXT)
002FEE  314A               1972+         DC    A(F00063)
                           1973 N00153   $FIXT FT=(F00052),GTO=((7A76,J))
002FF0  0101               1974+N00153   DC    A(@FIXT)
002FF2  31DC               1975+         DC    A(F00052)
                           1976 N00154   $TUXX T7A02,02,0010,OF,QT=(Q00006),YES=N00156,CT=(C00011)
002FF4  0500               1977+N00154   DC    A(@TUXX)
002FF6  300A               1978+         DC    AL2(N00156)
002FF8  3248               1979+         DC    A(T7A02)
002FFA  0202               1980+         DC    AL2(OF)
002FFC  0002               1981+         DC    AL2(02)
002FFE  0010               1982+         DC    X'0010'
                           1983+         ALIGN WORD
003000  0000               1984+         DC    AL2(0)
003002  C1C1               1985+         DC    C'AA'
                           1986+         ALIGN WORD
003004  196E               1987+         DC     AL2(PARMARA)
                           1988 N00155   $FIXT FT=(F00046),GTO=((7A72,E))
003006  0101               1989+N00155   DC    A(@FIXT)
003008  31EA               1990+         DC    A(F00046)
                           1991 N00156   $FIXT FT=(F00057),GTO=((7A70,B))
00300A  0101               1992+N00156   DC    A(@FIXT)
00300C  30D2               1993+         DC    A(F00057)
                           1994 N00157   $TUXX T7A02,07,00000000000020,ON,QT=(Q00007),YES=N00161,      X
00300E  0500               1995+N00157   DC    A(@TUXX)
003010  3048               1996+         DC    AL2(N00161)
003012  3248               1997+         DC    A(T7A02)
003014  0200               1998+         DC    AL2(ON)
003016  0007               1999+         DC    AL2(07)
003018  00000000000020     2000+         DC    X'00000000000020'
00301F  00                 2001+         ALIGN WORD
003020  0000               2002+         DC    AL2(0)
003022  C1C1               2003+         DC    C'AA'
                           2004+         ALIGN WORD
003024  196E               2005+         DC     AL2(PARMARA)
                           2006 N00158   $TUXX T7A02,09,00000080000000008000,OF,QT=(Q00006),YES=N00160,   X
003026  0500               2007+N00158   DC    A(@TUXX)
003028  3044               2008+         DC    AL2(N00160)
00302A  3248               2009+         DC    A(T7A02)
00302C  0202               2010+         DC    AL2(OF)
00302E  0009               2011+         DC    AL2(09)
003030  00000080000000800  2012+         DC    X'0000008000000008000'
003039  00                 2013+         ALIGN WORD
00303A  0000               2014+         DC    AL2(0)
00303C  C1C1               2015+         DC    C'AA'
                           2016+         ALIGN WORD
00303E  196E               2017+         DC     AL2(PARMARA)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                    COPYRIGHT IBM CORP 1976

                           2018 N00159   $FIXT FT=(F00058),GTO=((7A70,C))
003040  0101               2019+N00159   DC    A(@FIXT)
003042  30F2               2020+         DC    A(F00058)
                           2021 N00160   $FIXT FT=(F00059),GTO=((7A70,D))
003044  0101               2022+N00160   DC    A(@FIXT)
003046  31A0               2023+         DC    A(F00059)
                           2024 N00161   $TUXX T7A02,07,00004000000040,OF,QT=(Q00006),YES=N00167,      X
003048  0500               2025+N00161   DC    A(@TUXX)
00304A  3098               2026+         DC    AL2(N00167)
00304C  3248               2027+         DC    A(T7A02)
00304E  0202               2028+         DC    AL2(OF)
003050  0007               2029+         DC    AL2(07)
003052  00004000000040     2030+         DC    X'00004000000040'
003059  00                 2031+         ALIGN WORD
00305A  0000               2032+         DC    AL2(0)
00305C  C1C1               2033+         DC    C'AA'
                           2034+         ALIGN WORD
00305E  196E               2035+         DC     AL2(PARMARA)
                           2036 N00162   $TUXX T7A02,02,0010,OF,QT=(Q00006),YES=N00164,CT=(C00011)
003060  0500               2037+N00162   DC    A(@TUXX)
003062  3076               2038+         DC    AL2(N00164)
003064  3248               2039+         DC    A(T7A02)
003066  0202               2040+         DC    AL2(OF)
003068  0002               2041+         DC    AL2(02)
00306A  0010               2042+         DC    X'0010'
                           2043+         ALIGN WORD
00306C  0000               2044+         DC    AL2(0)
00306E  C1C1               2045+         DC    C'AA'
                           2046+         ALIGN WORD
003070  196E               2047+         DC     AL2(PARMARA)
                           2048 N00163   $FIXT FT=(F00057),GTO=((7A70,B))
003072  0101               2049+N00163   DC    A(@FIXT)
003074  30D2               2050+         DC    A(F00057)
                           2051 N00164   $TUXX T7A02,09,00000000800000080,OF,QT=(Q00006),YES=N00166,   X
003076  0500               2052+N00164   DC    A(@TUXX)
003078  3094               2053+         DC    AL2(N00166)
00307A  3248               2054+         DC    A(T7A02)
00307C  0202               2055+         DC    AL2(OF)
00307E  0009               2056+         DC    AL2(09)
003080  00000000800000008  2057+         DC    X'00000000800000080'
003089  00                 2058+         ALIGN WORD
00308A  0000               2059+         DC    AL2(0)
00308C  C1C1               2060+         DC    C'AA'
                           2061+         ALIGN WORD
00308E  196E               2062+         DC     AL2(PARMARA)
                           2063 N00165   $FIXT FT=(F00046),GTO=((7A72,E))
003090  0101               2064+N00165   DC    A(@FIXT)
003092  31EA               2065+         DC    A(F00046)
                           2066 N00166   $FIXT FT=(F00057),GTO=((7A70,B))
003094  0101               2067+N00166   DC    A(@FIXT)
003096  30D2               2068+         DC    A(F00057)
                           2069 N00167   $FIXT FT=(F00046),GTO=((7A72,E))
003098  0101               2070+N00167   DC    A(@FIXT)
00309A  31EA               2071+         DC    A(F00046)
00309C  0000               2072          DC    AL2(DUMMY)
00309E                     2073 ENTPT    EQU   *
                           2074 ********************************************************************
                           2075 ********************************************************************
                           2076 **                                                                **
                           2077 **                        ENTRY POINT TABLE                       **
                           2078 **                                                                **
                           2079 ********************************************************************
                           2080 ********************************************************************
                           2081          ENTPT EP=A,STEP=00001
00309E  C140               2082+         DC    CL2'A'
0030A0  27A0               2083+         DC    A(N00001)
0030A2  0000               2084          DC    AL2(DUMMY)
                           2085 ********************************************************************
                           2086 ********************************************************************
                           2087 **                                                                **
                           2088 **                        MESSAGE TABLE                           **
                           2089 **                                                                **
                           2090 ********************************************************************
                           2091 ********************************************************************
0030A4                     2092 F00047   EQU   *
0030A4  0001               2093          DC    AL2(0001)
0030A6  000A               2094          DC    A(0010)
0030A8  D4C1D740F7C1F7F26  2095          DC    CL0010'MAP 7A72-F'
0030B2                     2096 F00060   EQU   *
0030B2  0001               2097          DC    AL2(0001)
0030B4  001C               2098          DC    A(0028)
0030B6  E2C5D9E5D640F240C  2099          DC    CL0028'SERVO 2 CARD FAILURE (A1-F2)'
0030D2                     2100 F00057   EQU   *
0030D2  0001               2101          DC    AL2(0001)
0030D4  001C               2102          DC    A(0028)
0030D6  D3D6C7C9C340F140C  2103          DC    CL0028'LOGIC 1 CARD FAILURE (A1-C2)'
0030F2                     2104 F00058   EQU   *
0030F2  0001               2105          DC    AL2(0001)
0030F4  001C               2106          DC    A(0028)
0030F6  D3D6C7C9C340F240C  2107          DC    CL0028'LOGIC 2 CARD FAILURE (A1-D2)'
003112                     2108 F00051   EQU   *
003112  0001               2109          DC    AL2(0001)
003114  000A               2110          DC    A(0010)
003116  D4C1D740F7C1F7F66  2111          DC    CL0010'MAP 7A76-F'
003120                     2112 F00049   EQU   *
003120  0001               2113          DC    AL2(0001)
003122  000A               2114          DC    A(0010)
003124  D4C1D740F7C1F7F26  2115          DC    CL0010'MAP 7A72-R'
00312E                     2116 F00054   EQU   *
00312E  0001               2117          DC    AL2(0001)
003130  000A               2118          DC    A(0010)
003132  D4C1D740F7C1F7F66  2119          DC    CL0010'MAP 7A76-N'
00313C                     2120 F00053   EQU   *
00313C  0001               2121          DC    AL2(0001)
00313E  000A               2122          DC    A(0010)
003140  D4C1D740F7C1F7F66  2123          DC    CL0010'MAP 7A76-M'
00314A                     2124 F00063   EQU   *
00314A  0002               2125          DC    AL2(0002)
00314C  0014               2126          DC    A(0020)
00314E  D3D6C7C9C340F140C  2127          DC    CL0020'LOGIC 1 CARD (A1-C2)'
003162  0020               2128          DC    A(0032)
003164  D6D940E2E8E2E3C5D  2129          DC    CL0032'OR SYSTEM ADAPTER/ CABLE FAILURE'
003184                     2130 F00045   EQU   *
003184  0001               2131          DC    AL2(0001)
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                  COPYRIGHT IBM CORP 1976

003186  000A              2132            DC    A(0010)
003188  D4C1D740F7C1F7F26 2133            DC    CL0010'MAP 7A72-B'
003192                    2134 F00050     EQU   *
003192  0001              2135            DC    AL2(0001)
003194  000A              2136            DC    A(0010)
003196  D4C1D740F7C1F7F26 2137            DC    CL0010'MAP 7A72-X'
0031A0                    2138 F00059     EQU   *
0031A0  0001              2139            DC    AL2(0001)
0031A2  001C              2140            DC    A(0028)
0031A4  E2C5D9E5D640F140C 2141            DC    CL0028'SERVO 1 CARD FAILURE (A1-E2)'
0031C0                    2142 F00055     EQU   *
0031C0  0001              2143            DC    AL2(0001)
0031C2  000A              2144            DC    A(0010)
0031C4  D4C1D740F7C1F7F66 2145            DC    CL0010'MAP 7A76-R'
0031CE                    2146 F00048     EQU   *
0031CE  0001              2147            DC    AL2(0001)
0031D0  000A              2148            DC    A(0010)
0031D2  D4C1D740F7C1F7F26 2149            DC    CL0010'MAP 7A72-G'
0031DC                    2150 F00052     EQU   *
0031DC  0001              2151            DC    AL2(0001)
0031DE  000A              2152            DC    A(0010)
0031E0  D4C1D740F7C1F7F66 2153            DC    CL0010'MAP 7A76-J'
0031EA                    2154 F00046     EQU   *
0031EA  0001              2155            DC    AL2(0001)
0031EC  000A              2156            DC    A(0010)
0031EE  D4C1D740F7C1F7F26 2157            DC    CL0010'MAP 7A72-E'
                          2158       PDIT   00
0031F8  0000              2160+OPTN1 DC     X'0000'                 PROGRAM OPTION CONTROL WORD 1
                          2161+*
0031FA  0000              2162+OPTN2 DC     X'0000'                 PROGRAM OPTION CONTROL WORD 2
                          2163+*                    BIT    HEX
000010                    2164+B48   EQU    16      0      8       PROBLEM PROGRAM CONTROL BITS
000011                    2165+B49   EQU    17      1      4       *
000012                    2166+B50   EQU    18      2      2       * THESE BITS ARE USED WITH THE
000013                    2167+B51   EQU    19      3      1       * SECOND OPTION WD   AND ARE TO
000014                    2168+B52   EQU    20      4      8       * BE ASSIGNED BY EACH PROGRAMMER
000015                    2169+B53   EQU    21      5      4       *
000016                    2170+B54   EQU    22      6      2       *
000017                    2171+B55   EQU    23      7      1       *
000018                    2172+B56   EQU    24      8      8       *
000019                    2173+B57   EQU    25      9      4       *
00001A                    2174+B58   EQU    26      10     2       *
00001B                    2175+B59   EQU    27      11     1       *
00001C                    2176+B60   EQU    28      12     8       *
00001D                    2177+B61   EQU    29      13     4       *
00001E                    2178+B62   EQU    30      14     2       *
00001F                    2179+B63   EQU    31      15     1       *
                          2180+CH    EQU    30      14     2       CHARACTER SUPPLIED
00001F                    2181+CMP   EQU    31      15     1       COMPARE OPERATION
0031FC  0000              2183+OPTN3 DC     X'0000'                 PROGRAM OPTION CONTROL WORD 3
                          2184+*
                          2185+*  0  MYSTERY INTERRUPT     MI          8  CS STATUS IN PROGRESS    CS
                          2186+*  1  ERROR INTERRUPT       ER          9  CS AVAILABLE             CSA
                          2187+*  2  EXPECTED INTERRUPT    XI         10  CS STATUS INTERRUPT ERR  CE
                          2188+*  3  INTERRUPT RECEIVED    IN         11  ISB BITS ON (1-7)        ISBON
                          2189+*
                          2190+*  4  EXPECTED ERR/ATTENT   XE         12  TEST UNIT RESULTS VOID   NG
                          2191+*  5  HARD ERROR FOUND      HE         13  OIO CC ERROR             IOCC
                          2192+*  6  WRONG INTR LEVEL      $LE        14  NO INTERRUPT             NOIN
                          2193+*  7  NO INTR EXPECTED      NI         15  INTERRUPT CC ERROR       INCC
                          2194+*                    BIT    HEX
000020                    2195+MI    EQU    32      0      8       MYSTERY INTEPRUPT HAPPENED
000021                    2196+ER    EQU    33      1      4       ERROR RECEIVED ON INTERRUPT
000022                    2197+XI    EQU    34      2      2       EXPECTED INTERRUPT CONTROL BIT
000023                    2198+IN    EQU    35      3      1       INTERRUPT RECEIVED CONTROL BIT
000024                    2199+XE    EQU    36      4      8       EXPECTED ERROR RESPONSE
000025                    2200+HE    EQU    37      5      4       HARD ERROR, 8 RETRIES
000026                    2201+$LE   EQU    38      6      2       INTERRUPT ON WRONG LEVEL ERROR
000027                    2202+NI    EQU    39      7      1       NO INTERRUPT EXPECTED E
000028                    2203+CS    EQU    40      8      8       CYCLE STATUS IN PROGRESS
000029                    2204+CSA   EQU    41      9      4       CYCLE STEAL AVAILABLE
00002A                    2205+CE    EQU    42      10     2       CYCLE STEAL STATUS INERRUPT ERROR
00002B                    2206+ISBON EQU    43      11     1       ISB BITS ON (1-7)
00002C                    2207+NG    EQU    44      12     8       TEST UNIT RESULTS NO GOOD
00002D                    2208+IOCC  EQU    45      13     4       OIO CC ERROR
00002E                    2209+NOIN  EQU    46      14     2       NO INTERRUPT
00002F                    2210+INCC  EQU    47      15     1       INTERRUPT CC ERROR
                          2211+*
                          2212+*     COMMON BUFFER FOR PRINTING DATA
                          2213+*
0031FE  0000              2215+$TUID DC     A(*-*)                  TEST UNIT IDENTIFICATION
003200  0000              2216+$IOIN DC     A(*-*)                  I/O AND INTR CONDITION CODES
003202  0000              2217+$ISB  DC     A(*-*)                  R7, INTR STATUS BYTE & DEV ADRS
003204  0000              2218+LSTIO DC     A(*-*)                  ADRS OF LAST I/O + 4 BYTES
003206  0000              2219+DEV1  DC     A(*-*)                  DEVICE DEPENDENT DATA
003208  0000              2220+DEV2  DC     A(*-*)                  *
00320A  0000              2221+DEV3  DC     A(*-*)                  *
00320C  0000              2222+DEV4  DC     A(*-*)                  CS STATUS ERROR ISB & INTR CC
003206                    2223+SCTID EQU    DEV1                    PEAD ID BUFFER FOR IBIS & TERN
00320E                    2224+DCBUF EQU    *                       DCB BUFFER FOR LAST DCB USED
00320E  0000              2225+DCB1  DC     A(*-*)                  LAST DCB TABLE, CONTROL WORD
003210  0000              2226+DCB2  DC     A(*-*)                  LAST DCB TABLE, DEV DEP WORD
003212  0000              2227+DCB3  DC     A(*-*)                  LAST DCB TABLE, DEV DEP WORD
003214  0000              2228+DCB4  DC     A(*-*)                  LAST DCB TABLE, DEV DEP WORD
003216  0000              2229+DCB5  DC     A(*-*)                  LAST DCB TABLE, DEV DEP WORD
003218  0000              2230+DCB6  DC     A(*-*)                  LAST DCB TABLE, CHAIN ADRS
00321A  0000              2231+DCB7  DC     A(*-*)                  LAST DCB TABLE, BYTE COUNT
00321C  0000              2232+DCB8  DC     A(*-*)                  LAST DCB TABLE, BUFFER ADDRESS
                          2233+*
00321E                    2234+CSBUF EQU    *                       CYCLE STEAL DATA BUFFER
00321E  0000              2235+CSTL1 DC     A(*-*)                  CS STATUS WD 0, RESIDUAL ADDRESS
003220  0000              2236+CSTL2 DC     A(*-*)                  CS STATUS WD 1, RESIDUAL COUNT
003222  0000              2237+CSTL3 DC     A(*-*)                  CS STATUS WD 2, RETRY CNT WD 1
003224  0000              2238+CSTL4 DC     A(*-*)                  CS STATUS WD 3, RETRY CNT WD 2
003226  0000              2239+CSTL5 DC     A(*-*)                  CS STATUS WD 4, ERROR STATUS WD 1
003228  0000              2240+CSTL6 DC     A(*-*)                  CS STATUS WD 5, ERROR STATUS WD 2
00322A  0000              2241+CSTL7 DC     A(*-*)                  CS STATUS WD 6, LAST DCB ADDRESS
00322C  0000              2242+CSTL8 DC     A(*-*)                  CS STATUS WD 7, PREVIOUS HD/CYL
00322E  0000              2243+CSTL9 DC     A(*-*)                  CS STATUS WD 8, CURRENT HD/CYL
003230  0000              2244+CST10 DC     A(*-*)                  CS STATUS WD 9, FLAG/SECTOR
003232  0000              2245+CST11 DC     A(*-*)                  CS STATUS WD 10, HEAD/CYLINDER
003234  0000              2246+CST12 DC     A(*-*)                  CS STATUS WD 11, DIAG BYTES 1, 2,
003236  0000              2247+CST13 DC     A(*-*)                  CS STATUS WD 12, AND 3 + WRAP BYTE
                          2248+*
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                                  COPYRIGHT IBM CORP 1976

003238  0000              2249+$SUBN DC     A(*-*)                  LAST SUBROUTINE ADDRESS USED
00323A  00000000          2250+$DATA DC     2A(*-*)                 OPTIONAL DATA
00323E  0021              2251+$INTL DC     X'0021'                 INTERRUPT LEVEL REQUESTED
003240  0000              2252+TURTN DC     A(*-*)                  TEST UNIT RETURN ADRS TO MDI
003242  00                2253+$DVID DC     X'00'                   DEVICE ID
003244  19D0              2254+SVCAL DC     A(DEVADD)               ADRS OF DEVICE ADDRESS
003246  0000              2255+      DC     A(*-*)                  IBIS CYLINDER ADDRESS
                          2256+*
                          2257+*     THIS TEST UNIT WILL RETURN TO MDI WITHOUT DOING ANY PROGRAM
                          2258+*     FUNCTION. THE RESULTS THAT WERE SET UP IN THE RESULTS AREA ARE
                          2259+*     STILL VALID BUT A DIFFERENT TEST IS TO BE PERFORMED.
                          2260+*
003248  4020 31FE 7A02    2261+T7A02 MVWI   X'7A02',$TUID            SET UP TEST UNIT ID
00324E  5700              2262+      BXS    (R7)                    RETURN TO MDI SUPVR
                          2264       COPY   COMEQU
                          2265 ********************************************************************
                          2266 *                                                                  *
                          2267 *                EQUATED NAMES FOR SUPPORTED SVC'S                 *
                          2268 *                                                                  *
                          2269 ********************************************************************
000000                    2270 OUT    EQU    0                       OUT SVC
000001                    2271 OUTIN  EQU    1                       OUTIN SVC
000002                    2272 IDLE   EQU    2                       IDLE SVC
000003                    2273 IDLE5  EQU    3                       IDLE SVC - INDEPENDENT OF CPU TYPE
000004                    2274 CHNGE  EQU    4                       CHANGE LEVEL SVC
000005                    2275 PGMCK  EQU    5                       ALLOW RETURN ON PROGRAM CHECK SVC
000006                    2276 EXIT   EQU    6                       EXIT SVC
000007                    2277 TERM   EQU    7                       TERMINATE SVC
000008                    2278 RESET  EQU    8                       RESET DEVICE SVC
000009                    2279 RID    EQU    9                       READ ID SVC
00000A                    2280 START  EQU    10                      START CYCLE STEAL SVC
00000B                    2281 SMCSS  EQU    11                      START CYCLE STEAL STATUS SVC
00000C                    2282 PREP   EQU    12                      PREPARE DEVICE SVC
00000D                    2283 READ0  EQU    13                      READ WITH FUNCTION BIT 3 OFF SVC
00000E                    2284 READ1  EQU    14                      READ WITH FUNCTION BIT 3 ON SVC
00000F                    2285 RSTAT  EQU    15                      READ STATUS SVC
000010                    2286 WRIT0  EQU    16                      WRITE WITH FUNCTION BIT 3 OFF SVC
000011                    2287 WRIT1  EQU    17                      WRITE WITH FUNCTION BIT 3 ON SVC
000012                    2288 CTRL   EQU    18                      CONTROL SVC
000013                    2289 RICB   EQU    19                      RELEASE INTERUPT CONTROL BLOCK SVC
000014                    2290 CICB   EQU    20                      CONNECT INTERUPT CONTROL BLOCK SVC
000015                    2291 HIO    EQU    21                      HALT ALL I/O
000016                    2292 REQSD  EQU    22                      REQUEST USE OF DCP DISK SVC
000017                    2293 RELSD  EQU    23                      RELEASE USE OF DCP DISK SVC
000018                    2294 HALT   EQU    24                      HALT SVC
000019                    2295 ETOH   EQU    25                      EBCDIC TO HEX SVC (STRING)
00001A                    2296 HTOE   EQU    26                      HEX TO EBCDIC SVC (STRING)
00001B                    2297 ATOH   EQU    27                      ASCII TO HEX SVC (STRING)
00001C                    2298 HTOA   EQU    28                      HEX TO ASCII SVC (STRING)
00001D                    2299 ETOA   EQU    29                      EBCDIC TO ASCII SVC (STRING)
00001E                    2300 ATOE   EQU    30                      ASCII TO EBCDIC SVC (STRING)
00001F                    2301 READI  EQU    31                      READ DATA SETS FOR MDI/UTIL
000020                    2302 WRITI  EQU    32                      WRITE DATA SETS FOR UTIL
                          2304 ********************************************************************
                          2305 *                                                                  *
                          2306 *                EQUATES USED BY TU'S AS CONSTANTS                 *
                          2307 *                                                                  *
                          2308 ********************************************************************
00004E                    2309 PLUS   EQU    C'+'                    PLUS CHAR
000060                    2310 MINUS  EQU    C'-'                    MINUS CHAR
000000                    2312 ZERO   EQU    0
000001                    2313 ONE    EQU    1
000002                    2314 TWO    EQU    2
000003                    2315 THREE  EQU    3
000004                    2316 FOUR   EQU    4
000005                    2317 FIVE   EQU    5
000006                    2318 SIX    EQU    6
000007                    2319 SEVEN  EQU    7
000008                    2320 EIGHT  EQU    8
000009                    2321 NINE   EQU    9
00000A                    2322 TEN    EQU    10
00000B                    2323 ELEVN  EQU    11                                  11
00000C                    2324 TWELV  EQU    12                                  12
00000D                    2325 THRTN  EQU    13                                  13
00000F                    2326 FIVTN  EQU    15                                  15
000010                    2327 SIXTN  EQU    16                                  16
000020                    2328 THRY2  EQU    32                                  32
000040                    2329 SIXT4  EQU    64                                  64
000080                    2330 ONE28  EQU    128                                 128
000100                    2331 TWO56  EQU    256                                 256
000400                    2332 ONEK   EQU    1024                                1024
000800                    2333 TWOK   EQU    2048                                2048
000C00                    2334 THREK  EQU    3072                                3072
001000                    2335 FOURK  EQU    4096                                4096
FFFFFF                    2337 M1     EQU    -1                                  -1
FFFFFE                    2338 M2     EQU    -2                                  -2
FFFFFD                    2339 M3     EQU    -3                                  -3
FFFFFC                    2340 M4     EQU    -4                                  -4
                          2342 ********************************************************************
                          2343 *                                                                  *
                          2344 *     THE FOLLOWING ARE EQUATES FOR BIT DISPLACEMENTS FROM THE     *
                          2345 *     BEGINNING OF THE BYTE TO EACH BIT IN THE WORD OF SWITCHES.   *
                          2346 *                                                                  *
                          2347 ********************************************************************
000000                    2348 BS0    EQU    0
000001                    2349 BS1    EQU    1
000002                    2350 BS2    EQU    2
000003                    2351 BS3    EQU    3
000004                    2352 BS4    EQU    4
000005                    2353 BS5    EQU    5
000006                    2354 BS6    EQU    6
000007                    2355 BS7    EQU    7
000008                    2356 BS8    EQU    8
000009                    2357 BS9    EQU    9
00000A                    2358 BS10   EQU    10
00000B                    2359 BS11   EQU    11
00000C                    2360 BS12   EQU    12
00000D                    2361 BS13   EQU    13
00000E                    2362 BS14   EQU    14
00000F                    2363 BS15   EQU    15
                          2365       COPY   T7A00DCB                23JAN78
                          2366 ** (T7A00DCB)
                          2367 *
                          2368 ********************************************4/28/77*********
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                        COPYRIGHT IBM CORP 1976
                           2369 *
                           2370 *     DCB TABLES AND DC'S
                           2371 *
                           2372 ************************************************************************
                           2373 *
                           2374 ***** DIAGNOSTIC DCB   ********
                           2375 *
003250  2008               2376 DGDCB DC    X'2008'              DIAGNOSTIC DCB
003252  0000               2377       DC    A(*-*)               FLAG / PHYSICAL SECTOR#
003254  0000               2378       DC    A(*-*)               HEAD / CYLINDER#'S
003256  0000               2379       DC    X'0000'              NOT USED
003258  332A               2380       DC    A(RSBA)              RSB ADDRESS
00325A  0000               2381       DC    A(*-*)               CHAINING ADDRESS
00325C  0100               2382       DC    X'0100'              BYTE COUNT
00325E  0000               2383       DC    A(*-*)               DATA ADDRESS
                           2384 *
                           2385 ***** RECALIBRATE DCB  ********
                           2386 *
003260  0001               2387 CLDCB DC    X'0001'              RECALIBRATE DCB
003262  00000000000000000  2388       DC    7A(*-*)
                           2389 *
                           2390 ***** WRITE SECTOR ID  ********
                           2391 *
003270  002D               2392 WSDCB DC    X'002D'              WRITE SECTOR ID CNTL WORD
003272  0000               2393       DC    A(*-*)               FLAG / PHYSICAL SECTOR#
003274  0000               2394       DC    A(*-*)               HEAD / CYLINDER#'S
003276  0000               2395       DC    X'0000'              NOT USED
003278  332A               2396       DC    A(RSBA)              RSB ADDRESS
00327A  0000               2397       DC    A(*-*)               CHAIN ADDRESS
00327C  0004               2398       DC    X'0004'              BYTE COUNT
00327E  331E               2399       DC    A(WRSID)             ADDR OF SECTOR ID DATA
                           2400 *
                           2401 ***** READ SECTOR ID DCB  *******
                           2402 *
003280  201C               2403 RSDCB DC    X'201C'              READ SECTOR ID CNTL WORD
003282  0000               2404       DC    A(*-*)               FLAG / PHYSICAL SECTOR#
003284  0000               2405       DC    X'0000'              HEAD / CYLINDER#'S
003286  0000               2406       DC    X'0000'              NOT USED
003288  332A               2407       DC    A(RSBA)              RSB ADDRESS
00328A  0000               2408       DC    A(*-*)               CHAIN ADDRESS
00328C  0004               2409       DC    X'0004'              BYTE COUNT FOR READ SECTOR ID
00328E  3206               2410       DC    A(SCTID)             SECTOR ID DATA ADDRESS
                           2411 *
                           2412 ***** SEEK DCB  ********
                           2413 *
003290  0000               2414 SKDCB DC    X'0000'              SEEK DCB CONTROL WORD
003292  0000               2415       DC    X'0000'              NOT USED
003294  0000               2416       DC    A(*-*)               HEAD / CYLINDER#'S
003296  0000               2417       DC    X'0000'              NOT USED
003298  332A               2418       DC    A(RSBA)              RSB ADDRESS
00329A  0000               2419       DC    A(*-*)               CHAIN ADDRESS
00329C  0000               2420       DC    X'0000'              NOT USED
00329E  0000               2421       DC    X'0000'              NOT USED
                           2422 *
                           2423 ***** CYCLE STEAL STATUS DCB  ********
                           2424 *
0032A0  2000               2425 CSDCB DC    X'2000'              CONTROL WORD
0032A2  0000               2426       DC    F'0'                 NOT USED
0032A4  0000               2427       DC    F'0'                 NOT USED
0032A6  0000               2428       DC    F'0'                 NOT USED
0032A8  0000               2429       DC    F'0'                 NOT USED
0032AA  0000               2430       DC    F'0'                 NOT USED
0032AC  001A               2431       DC    X'001A'              13 WORDS OF STATUS
0032AE  321E               2432       DC    A(CSBUF)             ADDRESS OF CYCLE STEAL STATUS DATA
                           2433 *
                           2434 ***** WRITE DCB  **********
                           2435 *
0032B0  0028               2436 WRDCB DC    X'0028'              WRITE DATA DCB CNTL WORD
0032B2  0000               2437       DC    A(*-*)               FLAG / RECORD#
0032B4  0000               2438       DC    A(*-*)               HEAD / CYLIDNER#'S
0032B6  0000               2439       DC    A(*-*)               SCAN / REPEAT COUNT
0032B8  332A               2440       DC    A(RSBA)              RSB ADDRESS
0032BA  0000               2441       DC    A(*-*)               CHAIN ADDRESS
0032BC  0100               2442       DC    X'0100'              BYTE COUNT
0032BE  0000               2443       DC    A(*-*)               WRITE DATA ADDRESS
                           2444 *
                           2445 ***** VERIFY DCB   *******
                           2446 *
0032C0  0019               2447 VRDCB DC    X'0019'              CONTROL WORD
0032C2  0000               2448       DC    A(*-*)               FLAG / RECORD#
0032C4  0000               2449       DC    A(*-*)               HEAD / CYLINDER#'S
0032C6  0000               2450       DC    A(*-*)               SCAN / REPEAT COUNT
0032C8  332A               2451       DC    A(RSBA)              RSB ADDRESS
0032CA  0000               2452       DC    A(*-*)               CHAIN ADDRESS
0032CC  0000               2453       DC    A(*-*)               BYTE COUNT
0032CE  0000               2454       DC    F'0'                 NOT USED
                           2455 *
                           2456 ***** READ DCB   *******
                           2457 *
0032D0  2018               2458 RDDCB DC    X'2018'              READ DCB CONTROL WORD
0032D2  0000               2459       DC    A(*-*)               FLAG / RECORD#
0032D4  0000               2460       DC    A(*-*)               HEAD / CYLINDER#'S
0032D6  0000               2461       DC    A(*-*)               SCAN / REPEAT COUNT
0032D8  332A               2462       DC    A(RSBA)              RSB ADDRESS
0032DA  0000               2463       DC    A(*-*)               CHAIN ADDRESS
0032DC  0100               2464       DC    X'0100'              BYTE COUNT
0032DE  0000               2465       DC    A(*-*)               READ DATA ADDRESS
                           2466 *
                           2467 ****  WRITE SECTOR ID SKEWED    ****
                           2468 *
0032E0  002F               2469 WKDCB DC    X'002F'              CONTPOL WORD
0032E2  0000               2470       DC    A(*-*)               FLAG / PHYSICAL SECTOR#
0032E4  0000               2471       DC    A(*-*)               HEAD / CYLINDER#'S
0032E6  0000               2472       DC    F'0'                 NOT USED
0032E8  332A               2473       DC    A(RSBA)              RSB ADDRESS
0032EA  0000               2474       DC    A(*-*)               CHAIN ADDRESS
0032EC  0004               2475       DC    X'0004'              BYTE COUNT
0032EE  331E               2476       DC    A(WRSID)             ADDR OF SECTOR ID DATA
                           2477 *
                           2478 ****  READ SECTOR ID SKEWED     ****
                           2479 *
0032F0  201D               2480 RKDCB DC    X'201D'              CONTROL WORD
0032F2  0000               2481       DC    A(*-*)               FLAG / PHYSICAL SECTOR#
0032F4  0000               2482       DC    A(*-*)               HEAD / CYLINDER#'S
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                        COPYRIGHT IBM CORP 1976
0032F6  0000               2483       DC    F'0'                 NOT USED
0032F8  332A               2484       DC    A(RSBA)              RSB ADDRESS
0032FA  0000               2485       DC    A(*-*)               CHAIN ADDRESS
0032FC  0004               2486       DC    X'0004'              BYTE COUNT
0032FE  3206               2487       DC    A(SCTID)             SECTOR ID DATA ADDRESS
                           2488 *
                           2489 ****  READ MULTIPLE SECTOR IDS     ****
                           2490 *
003300  201C               2491 RMDCB DC    X'201C'              CONTROL WORD
003302  0000               2492       DC    A(*-*)               FLAG / PHYSICAL SECTOR#
003304  0000               2493       DC    A(*-*)               HEAD / CYLINDER#'S
003306  0000               2494       DC    F'0'                 NOT USED
003308  332A               2495       DC    A(RSBA)              RSB ADDRESS
00330A  0000               2496       DC    A(*-*)               CHAIN ADDRESS
00330C  0084               2497       DC    X'0084'              BYTE COUNT
00330E  333A               2498       DC    A(ID00)              DATA AREA ADDRESS
                           2499 *
                           2500 *     CONSTANTS AND DEFINED STORAGE  LOCATIONS
003310  0000               2501 ZERO0 DC    X'0000'              CONSTANT ZERO
003312  0001               2502 ONE1  DC    X'0001'              CONSTANT ONE
003314  0000               2503 RAY   DC    A(*-*)               WRITE PARAMETER POINTER
003316  EB6D               2504 WDATA DC    X'EB6D'              WRITE DATA
003318  6BDB               2505       DC    X'6BDB'              *
00331A  0000               2506 LGSEC DC    X'0000'              LOGICAL SECTOR #
00331C  0000               2507 PHYSC DC    X'0000'              CONVERTED PHYSICAL SEC #
00331E  0000               2508 WRSID DC    X'0000'              FLAG,SECTOR   (WRT SECTOR ID DATA)
003320  0000               2509       DC    X'0000'              HEAD,CYLINDER
003322  FF34               2510 WSIDT DC    X'FF34'              WRITE SECTOR ID TEST DATA
003324  5678               2511       DC    X'5678'              *
003326  0000               2512 SCTST DC    X'0000'              READ SECTOR ID TEST DATA BUFFER
003328  0000               2513       DC    X'0000'
00332A  00000000000000000  2514 RSBA  DC    6A(*-*)              RESIDUAL STATUS BLOCK
00332C  0000               2515 CTR02 DC    X'0000'              COUNTER
00332E  0000               2516 CTR03 DC    X'0000'              COUNTER
003330  0000               2517 ID00  DC    X'0000'              ID ADDRESS TO BE SET BY USER
003332  1010               2518 PDATA DC    X'1010'              WRITE DIAG WORD 1 DATA PATTERNS
003334  5555               2519       DC    X'5555'              *
003336  AAAA               2520       DC    X'AAAA'              *
003338  FFFF               2521       DC    X'FFFF'              *
                           2522 *
                           2523 ****************************4/06/77**********************************
                           2524 *
                           2525 *  SUBROUTINE
                           2526 *
                           2527 *     PURPOSE
                           2528 *
                           2529 *          COMPARE READ SECTOR ID DATA TO WRITE SECTOR ID DATA
                           2530 *
                           2531 *     CALLING SEQUENCE
                           2532 *
                           2533 *          BAL  CMPRW,R6          (NORMAL)
                           2534 *
                           2535 *     RETURN
                           2536 *
                           2537 *          BXS (R6,2)     -   NORMAL
                           2538 *
                           2539 *
                           2540 ************************************************************************
                           2541 *
003344  4724 0004          2542 CMPRW MVWI  4,R7                   COMPARE BYTE COUNT
003348  4324 3206          2543       MVA   SCTID,R3               ADDR OF RD SEC ID DATA
00334C  4524 331E          2544       MVA   WRSID,R5               ADDR OF WR SEC ID DATA
003350  2BA6               2545       CFNEN (R3),(R5)              COMPARE ID DATA
003352  68C0 0002          2546       BE    (R6,2)                 BCH IF WRITE ID DATA OK
003356  68D2 0000          2547       B     (R6)*                  COMPARE ERROR
                           2549 ************************************************************
                           2550 *
                           2551 *     EXECUTE INPUT & OUTPUT COMMANDS
                           2552 *     TO EXECUTE ALL I/O COMMANDS FROM A COMMON PLACE.
                           2553 *     EACH OF THESE ENTRIES SET R7 WITH THE ADRS OF ITS PARAMETER
                           2554 *     LIST AND ANY SPECIAL SWITCHES BEFORE BRANCHING TO THE
                           2555 *     SUPVR CALL.
                           2556 *
                           2557 *     THIS SUBROUTINE WILL CHECK FOR THE FOLLOWING:
                           2558 *
                           2559 *     1. LOST INTERRUPTS BY TIMING OUT A COUNTING LOOP
                           2560 *     2. ERROR INTERRUPTS RECEIVED FROM SUPVR
                           2561 *
                           2562 *     THIS ROUTINE HAS THE FOLLOWING ENTRIES:
                           2563 *
                           2564 *  1    BAL   $RKEW,R6               READ SECTOR ID SKEWED
                           2565 *
                           2566 *  2    BAL   $WKEW,R6               WRITE SECTOR ID SKEWED
                           2567 *
                           2568 *  3    BAL   $WSEC,R6               WRITE SECTOR ID
                           2569 *
                           2570 *  4    BAL   $DIAG,R6               DIAGNOSTIC
                           2571 *
                           2572 *  5    BAL   XIOCS,R6               CYCLE STEAL STATUS
                           2573 *
                           2574 *  6    BAL   $SEEK,R6               SEEK
                           2575 *
                           2576 *  7    BAL   $RECL,R6               RECALIBRATE
                           2577 *
                           2578 *  8    BAL   $RDID,R6               READ SECTOR ID
                           2579 *
                           2580 *  9    BAL   $RD,R6                 READ
                           2581 *
                           2582 *  10   BAL   $RDVY,R6               READ VERIFY
                           2583 *
                           2584 *  11   BAL   $WRT,R6                WRITE
                           2585 *
                           2586 *  12   BAL   $RDIM,R6               READ MULTI SECTOR IDS
                           2587 *
                           2588 ************************************************************************
                           2589 *
003356  507F               2590 $SEEK MVA   SKDCB,IODCB             SET UP CONTROL BLOCK FOR SVC CALL
                           2591       J     XIO
                           2592 *
003362  4020 3572 3260     2593 $RECL MVA   CLDCB,IODCB             SET UP BLOCK FOR SVC CALL
003368  507E               2594       J     XIO
                           2595 *
00336A  4020 3572 3280     2596 $RDID MVA   RSDCB,IODCB             SET UP BLOCK FOR SVC CALL
003370  0BBB               2597       MVBI  X'BB',R3               SET BUFFER TO B'S
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 LOCTR  OBJECT TEXT      STMT SOURCE STATEMENT                    COPYRIGHT IBM CORP 1976
003372 4524 3206         2598         MVA   SCTID,R5              SETUP READ SECTOR ID BUFFER ADRS
003376 4724 0004         2599         MVWI  4,R7                  SETUP BUFFER LENGTH
00337A 2BAC              2600         FFN   R3,(R5)               INIT READ SECTOR ID BUFFER
00337C 4020 328E 3206    2601         MVA   SCTID,RSDCB+14        DATA ADDR
003382 506E              2602         J     XIO
                         2603 *
003384 4020 3572 3300    2604 $RDIM MVA   RMDCB,IODCB           SET UP CONTROL BLOCK FOR SVC CALL
00338A 4724 0084         2605         MVWI  132,R7                SET BUFFER LENGTH
00338E 4524 333A         2606         MVA   ID00,R5               SET BUFFER ADDRESS
003392 0BBB              2607         MVBI  X'BB',R3              SET CLEAR CHARACTERS
003394 2BAC              2608         FFN   R3,(R5)               CLEAR THE BUFFER
003396 5064              2609         J     XIO
                         2610 *
003398 0BFF              2611 $RD   MVBI  X'FF',R3              SETRD BUFFER TO ALL F'S
00339A 6D08 32DE         2612         MVW   RDDCB+14,R5           SET UP READ BUFFER ADRS
00339E 6F08 32DC         2613         MVW   RDDCB+12,R7           SET UP BUFFER LENGTH
0033A2 2BAC              2614         FFN   R3,(R5)               CLEAR READ BUFFER
0033A4 4020 3572 32D0    2615 $RD$  MVA   RDDCB,IODCB           SET UP BLOCK FOR SVC CALL
0033AA 505A              2616         J     XIO
                         2617 *
0033AC 4020 3572 32C0    2618 $RDVY MVA   VRDCB,IODCB           SET UP CONTROL BLOCK FOR SVC CALL
0033B2 5056              2619         J     XIO
                         2620 *
0033B4 4020 3572 32B0    2621 $WRT  MVA   WRDCB,IODCB           SET UP CONTROL BLOCK FOR SVC CALL
0033BA 5052              2622         J     XIO
                         2623 *
0033BC 4020 3572 32F0    2624 $RKEW MVA   RKDCB,IODCB            SET UP CONTROL BLOCK FOR SVC CALL
0033C2 0BBB              2625         MVBI  X'BB',R3              SET BUFFER TO B'S
0033C4 4524 3206         2626         MVA   SCTID,R5              SETUP READ SECTOR ID BUFFER ADRS
0033C8 4724 0004         2627         MVWI  4,R7                  SETUP BUFFER LENGTH
0033CC 2BAC              2628         FFN   R3,(R5)               INIT READ SECTOR ID BUFFER
0033CE 4020 32FE 3206    2629         MVA   SCTID,RKDCB+14         DATA ADDR
0033D4 5045              2630         J     XIO
                         2631 *
0033D6 4020 3572 32E0    2632 $WKEW MVA   WKDCB,IODCB            SET UP CONTROL BLOCK FOR SVC CALL
0033DC 4020 32EE 331E    2633         MVA   WRSID,WKDCB+14        DATA ADDR
0033E2 503E              2634         J     XIO
                         2635 *
0033E4 4020 3572 3270    2636 $WSEC MVA   WSDCB,IODCB            SET UP CONTROL BLOCK FOR SVC CALL
0033EA 4020 327E 331E    2637         MVA   WRSID,WSDCB+14        DATA ADDR
0033F0 5037              2638         J     XIO
                         2639 *
0033F2 4020 3572 3250    2640 $DIAG MVA   DGDCB,IODCB           SET UP CONTROL BLOCK FOR SVC CALL
0033F8 5033              2641         J     XIO
                         2642 *
0033FA 6E0D 3204         2643 $WRT0 MVW   R6,LSTIO               SAVE IAR FOR RETRY IF REQUESTED
0033FE 0BFF              2644         MVBI  255,R3                CLEAR CYCLE STATUS BUFFER
003400 4524 321E         2645         MVA   CSBUF,R5              *   TO ALL ONES   *
003404 0F16              2646         MVBI  22,R7                 *
003406 2BAC              2647         FFN   R3,(R5)               *
003408 4524 320E         2648         MVA   DCBUF,R5              CLEAR DCB BUFFER TO ALL ONES
00340C 0F10              2649         MVBI  16,R7                 *
00340E 2BAC              2650         FFN   R3,(R5)               *
003410 4020 3200 0708    2651         MVWI  X'0708',$IOIN         OVERLAY OLD CONDITION CODES
003416 CB25 3202         2652         MVWZ  $ISB,R3               ZERO OUT OLD ISB VALUE
00341A 4CA3              2653         TBTR  (R4,IN)               CLEAR INTERRUPT RECEIVED CNTL BIT
00341C 4CA1              2654         TBTR  (R4,ER)               RESET ANY ERROR BEFORE I/O COMMAND
00341E 4C62              2655         TBTS  (R4,XI)               SET EXPECTED  INTR CONTROL BIT
003420 4724 356E         2656         MVI   IOBLK,R7              SET UP CONTROL BLK FOR SUPR
003424 C020 3575         2657         MVB   IOMOD+1,R0            GET IDCB FUNC/MODIFIER
003428 402D 3574 00F0    2658         RBTWI X'00F0',IOMOD         REMOVE FUNCTION FROM 'IOMOD'
00342E 3022              2659         SRL   4,R0                  RIGHT JUSTIFY FUNCTION BITS IN R0
003430 F005              2660         CBI   5,R0                  IDCB FUNCTION = 5?
003432 1003              2661         JE    $WRT1                 YES - ISSUE 'SVC  WRIT1'
003434 6010              2662         SVC   WRIT0                 ISSUE WRITE DPC '4X' OP
003436 6802 34BA         2663         B     XIO8-4                GO WAIT FOR THE INTERRUPT
00343A 6011              2664 $WRT1 SVC   WRIT1                 ISSUE WRITE DPC '5X' OP
00343C 6802 34BA         2665         B     XIO8-4                GO WAIT FOR THE INTERRUPT
                         2666 *
003440 4020 3572 32B0    2667 $DGWR MVA   WRDCB,IODCB           SET UP CONTROL BLK FOR SVC CALL
003446 6802 3466         2668         B     XIODG                 ISSUE START CS DIAG CMD
                         2669 *
00344A 4020 3572 32D0    2670 $DGRD MVA   RDDCB,IODCB           SET UP CONTROL BLK FOR SVC CALL
003450 6F08 32DC         2671         MVW   RDDCB+12,R7           GET NO. OF BYTES TO CLEAR
003454 6D08 32DE         2672         MVW   RDDCB+14,R5           ADDR OF READ BUFFER
003458 0BFF              2673         MVBI  X'FF',R3              CLEAR TO F'S
00345A 2BAC              2674         FFN   R3,(R5)               *
00345C 6802 3466         2675         B     XIODG                 ISSUE START CS DIAG CMD
                         2677         COPY  T7AXEQ                09MAR78
                         2678          PRINT OFF
                         3242         T7AXEQ
                         3243+*****************************************************************29JUL76**
                         3244+*
                         3245+* SUB-ROUTINE
                         3246+*
                         3247+*     EXECUTE INPUT AND OUTPUT COMMANDS
                         3248+*
                         3249+* PURPOSE
                         3250+*
                         3251+*     TO EXECUTE ALL I/O COMMANDS FROM A COMMON PLACE.
                         3252+*     THIS SUBROUTINE WILL DO THE FOLLOWING FUNCTIONS:
                         3253+*
                         3254+*       1. SAVE THE ADDRESS THAT POINTS TO THE INSTRUCTION THAT STARTED
                         3255+*          THE I/O COMMAND.
                         3256+*       2. SAVES THE DCB BLOCK USED UNLESS IT IS A START CYCLE STATUS
                         3257+*          ISSUED BY THIS SUBROUTINE.
                         3258+*       3. CLEAR OUT THE CYCLE STEAL STATUS STORAGE UNLESS THE
                         3259+*          START CYCLE STATUS WAS ISSUED BY THIS SUBROUTINE.
                         3260+*       4. RESETS THE INTERRUPT INDICATOR AND CHECKS FOR ANY INTERRUPT
                         3261+*          SINCE THE LAST EXPECTED INTERRUPT.  IF AN INTERRUPT IS FOUND,
                         3262+*          MYSTERY INTERRUPT (MI) CONTROL BIT IS SET.
                         3263+*       5. MOVES THE ADDRESS OF THE I/O CONTROL BLOCK IN R7, SET THE
                         3264+*          EXPECTED INTERRUPT CONTROL BIT AND ISSUE THE 'SVC  START'.
                         3265+*       6. WHEN THE SUPVR RETURNS AFTER ISSUING THE I/O COMMAND, TIMING
                         3266+*          STARTS TO DETERMINE A LOST INTERRUPT.
                         3267+*       7. EXCEPT THE INTERRUPT AND GATHER INFORMATION TO DETERMINE IF IT
                         3268+*          WAS AN ERROR OR OKAY AND EXIT OFF THE INTERRUPT LEVEL.
                         3269+*       8. CHECK IF THERE WAS A WRONG INTERRUPT LEVEL.
                         3270+*       9. CHECK IF AN ERROR WAS EXPECTED AND IF THERE WAS RETURN.
                         3271+*      10. CHECK IF THERE WAS AN ERROR CONDITION, IF NOT RETURN.
                         3272+*      11. CHECK TO SEE IF THE EXERCISER IS TO BE TERMINATED.
                         3273+*      12. CHECK IF A CYCLE STEAL OPERATION WAS IN PROGRESS THAT WAS
                         3274+*          ISSUED BY THIS SUBROUTINE.
                         3275+*      13. CHECK THE ISB BITS THAT ARE ON. IF BIT 0 IS ON, ISSUE A
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 LOCTR  OBJECT TEXT      STMT SOURCE STATEMENT                    COPYRIGHT IBM CORP 1976
                         3276+*       CYCLE STEAL STATUS COMMAND. CHECK FOR ANY OTHER BIT BEING ON,
                         3277+*       COUNT IT AND SET UP THE PROPER ERROR MESSAGE TO BE PRINTED.
                         3278+*
                         3279+* CALLING SEQUENCE
                         3280+*
                         3281+*     THIS ROUTINE HAS THE FOLLOWING ENTRIES:
                         3282+*
                         3283+* --> BAL   XIO        OR          XEQ ANY CYCLE STEAL COMMAND, MOD=0
                         3284+* --> BAL   XIO1                  MOD PARM PRELOADED IN 'IOMOD'
                         3285+* --> BAL   XIOCS,R6   OR          XEQ START CYCLE STEAL STATUS, MOD=F
                         3286+* --> BAL   XIOCS-4,R6            AUTO CS STATUS (FOLLOWING OTHER XIO
                         3287+*     .                           AND DOES NOT POST INTERRUPT STATUS)
                         3288+*
                         3289+* RETURN CONTROL
                         3290+*
                         3291+*     BXS   (R6,2)                RETURN TO USER NO ERROR
                         3292+* OR  B     (R6)*                 RETURN AND RETRY ON ERROR
                         3293+*****************************************************************
003460 CB25 3574          3295+XIO   MVWZ  IOMOD,R3              SET MOF OF 0 FOR CYCLE STEAL OP
003464 500E               3296+      J     XIO1                  CS I/O'S ARE NOT RETRIED
                         3297+*
003466 4020 3574 000D     3298+XIODG MVWI  X'000D',IOMOD         SET MODIFIER FOR DIAGNOSTIC OPS
00346C 500A               3299+      J     XIO1                  GO TO CS OPS
                         3300+*
00346E 4CAA               3301+      TBTR  (R4,CE)               RESET CS STATUS INTER ERROR INDICAT.
003470 4C68               3302+      TBTS  (R4,CS)               SET 'CYCLE STEAL STATUS' IN PROGRESS
003472 4020 3572 32A0     3303+XIOCS MVA   CSDCB,IODCB           SET UP CONTROL BLOCK FOR SVC CALL
003478 4020 3574 000F     3304+      MVWI  X'000F',IOMOD         SET CYCLE STEAL MODIFIER
00347E 4C28               3305+      TBT   (R4,CS)               IS CS IN PROGRESS, ERROR CONDITION
003480 1213               3306+      JON   XIO2                  * YES, BYPASS SAVING I/O ADRS
003482 6E0D 3204          3307+XIO1  MVW   R6,LSTIO              SAVE IAR FOR RETRY IF REQUESTED
003486 4324 320E          3308+      MVA   DCBUF,R3              SET UP TO ADRS TO MOVE DCB TABLE
00348A 6D08 3572          3309+      MVW   IODCB,R5              * AND THE FROM ADRS, ALONG WITH
00348E 0F1A               3310+      MVBI  26,R7                 * THE NUMBER OF MOVES
003490 2D64               3311+      MVFN  (R5),(R3)             MOVE 1 STATUS WORD AND ADJUST
003492 0BFF               3312+      MVBI  255,R3                CLEAR CYCLE STATUS BUFFER
003494 4524 321E          3313+      MVA   CSBUF,R5              *   TO ALL ONES   *
003498 0F1A               3314+      MVBI  26,R7                 *
00349A 2BAC               3315+      FFN   R3,(R5)               *
00349C 4020 3200 0708     3316+      MVWI  X'0708',$IOIN         OVERLAY OLD CONDITION CODES
0034A2 CB25 3202          3317+      MVWZ  $ISB,R3               ZERO OUT OLD ISB VALUE
                         3318+*
0034A6 4CA1               3319+      TBTR  (R4,ER)               RESET ANY ERROR BEFORE I/O COMMAND
0034A8 4CA3               3320+XIO2  TBTR  (R4,IN)               CLEAR INTERRUPT RECEIVED CNTL BIT
0034AA 4724 356E          3321+      MVA   IOBLK,R7              SET UP CONTROL BLOCK FOR SUPVR
0034AE 4CA6               3322+      TBTR  (R4,SLE)              RESET LEVEL ERROR INDICATOR
0034B0 4C62               3323+      TBTS  (R4,XI)               SET EXPECTED INTR CONTROL BIT
0034B2 600A               3324+      SVC   START                 CALL SUPVR FOR I/O COMMAND
                         3325+*
0034B4 4CA7               3326+      TBTR  (R4,NI)               IS AN INTR EXPECTED
0034B6 6AC0 0002          3327+      BN    (R6,2)                * NO, RETURN TO USER
                         3328+*
                         3329+*          THE INTR SHOULD OCCUR WHILE SPINNING IN THE NEXT SECTION
                         3330+*
0034BA 4524 0000          3331+      MVWI  0,R5                  SET UP WORK REG FOR 'LOST INTR'
0034BE 4CA3               3332+XIO8  TBTR  (R4,IN)               HAS INTERRUPT BEEN RECEIVED
0034C0 1239               3333+      JON   XIOCK                 * YES, CHECK IF ALL WAS SATISFACTORY
0034C2 6002               3334+      SVC   IDLE                  ALLOW ANOTHER PROGRAM A CHANCE TO RUN
                         3335+*                                 SUPVR WILL RETURN HERE
0034C4 6002               3336+      SVC   IDLE                  ALLOW ANOTHER PROGRAM A CHANCE TO RUN
                         3337+*                                 SUPVR WILL RETURN HERE
0034C6 7DA1 0001          3338+      AWI   1,R5                  ADVANCE TIME OUT COUNT
0034CA 18F9               3339+      JNZ   XIO8                  BCH IF TIME OUT NOT REACHED
0034CC 4C61               3340+      TBTS  (R4,ER)               SET ON ERROR CONTROL BIT
0034CE 68D2 0000          3341+      B     (R6)*                 ERR 'NO INTERRUPT'
                         3343+*****************************************************************03FEB76**
                         3344+*
                         3345+* SUBROUTINE
                         3346+*
                         3347+*     I/O EXECUTE ERROR HANDLING ROUTINE
                         3348+*
                         3349+* PURPOSE
                         3350+*
                         3351+*     THIS ROUTINE WILL COLLECT INFORMATION TO HELP DETERMINE THE
                         3352+*     PROBLEM THAT WAS FOUND WHEN THE I/O COMMAND WAS ISSUED BY THE
                         3353+*     SUPERVISOR AND IT WAS NOT ACCEPTED.
                         3354+*
                         3355+* CALLING SEQUENCE
                         3356+*
                         3357+*     SUPVR WILL ENTER WHEN AN ERROR OCCURS ON AN I/O COMMAND
                         3358+*
                         3359+* RETURN CONTROL
                         3360+*
                         3361+*     B     (R6)*                 RETURN TO USERS ERROR HANDLER
                         3362+*
                         3363+*****************************************************************
                         3364+*
                         3365+* CC         0= DEVICE NOT ATTACHED
                         3366+* FOR        1= DEVICE BUSY
                         3367+* I/O        2= DEVICE BUSY AFTER RESET
                         3368+*           3= COMMAND REJECT
                         3369+*           4= INTERVENTION REQUIRED
                         3370+*           5= INTERFACE DATA CHECK
                         3371+*           6= CONTROLLER BUSY
                         3372+*           7= I/O COMMAND EXCEPTED
                         3373+*
0034D2 706E              3374+XIOER CPLSR R3                    COPY STATUS ANY LEVEL INTO R3
0034D4 336A              3375+      SRL   13,R3                 POSITION CC CODE TO BITS 13-15
0034D6 C328 3200         3376+      MVB   R3,$IOIN              * PUT IN LOG OUT AREA
0034DA 68D2 0000         3377+      B     (R6)*                 RETURN TO USER ERROR HANDLER
                         3379+*****************************************************************14APR76**
                         3380+*                                                                 IL
                         3381+* SUB-ROUTINE                                                    IL
                         3382+*                                                                 IL
                         3383+*     ERROR INTERRUPT             RUNS ON INTERRUPT LEVEL '$INTL' IL
                         3384+*                                                                 IL
                         3385+* PURPOSE                                                        IL
                         3386+*                                                                 IL
                         3387+*     THIS ROUTINE WILL BE ENTERED WHEN THE SUPVR DETECTS AN ERROR IL
                         3388+*     OR THE INTERRUPTING CONDITION CODE DOES NOT AGREE WITH THE   IL
                         3389+*     EXPECTED CODE.                                              IL
                         3390+*                                                                 IL
                         3391+* CALLING SEQUENCE                                              IL
                         3392+*                                                                 IL
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                    COPYRIGHT IBM CORP 1976

                           3393+*     SUPVR WILL ENTER WHEN AN ERROR OCCURS ON AN I/O INTERRUPT      IL
                           3394+*                                                                    IL
                           3395+* RETURN CONTROL                                                     IL
                           3396+*                                                                    IL
                           3397+*     SVC   EXIT                    RETURN TO USER VIA SUPVR        IL
                           3398+*                                                                    IL
                           3399+*************************************************************************IL
                           3400+*                                                                    IL
                           3401+* CC        0= CONTROLLER END                  ISB   0= ADD STATUS    IL
                           3402+* FOR       1= PROGRAM CONTROL INTERRUPT       BITS  1= COMD REJECT   IL
                           3403+* INTR      2= EXCEPTION INTERRUPT             FOR   2= INCOR LENGTH  IL
                           3404+*           3= DEVICE END INTERRUPT            INTR  3= DCB SPEC CK   IL
                           3405+*           4= ATTENTION INTERRUPT                   4= STG DATA CK   IL
                           3406+*           5= ATTENTION / PROGRAM CNTL INTR         5= INV STG ADRS  IL
                           3407+*           6= ATTENTION / EXCEPTION INTR            6= PROTECT CK    IL
                           3408+*           7= ATTENTION / DEVICE END INTR           7= I-FACE DATA   IL
                           3409+*                                                                    IL
0034DE  706E               3410+INTER CPLSR R3                       COPY STATUS ANY LEVEL INTO R3   IL
0034E0  336A               3411+      SRL   13,R3                    POSITION INDICATORS IN R3       IL
0034E2  4424  31F8         3412+      MVA   OPTN1,R4                 SET UP BASE ADRS                IL
0034E6  4C28               3413+      TBT   (R4,CS)                  IS CS IN PROGRESS               IL
0034E8  1006               3414+      JOFF  INTES                    * NO                            IL
0034EA  4C6A               3415+      TBTS  (R4,CE)                  TURN ON CYCLE STEAL INTER ERROR IL
0034EC  6F0D  320C         3416+      MVW   R7,DEV4                  SAVE CS ERR ISB VALUE, BITS 0-7 IL
0034F0  C328  320D         3417+      MVB   R3,DEV4+1                * AND THE COND CODE             IL
0034F4  500A               3418+      J     INTR1                                                   IL
0034F6  4C24               3419+INTES TBT   (R4,XE)                  TEST  EXPECTED ATTEN / ERROR IND IL
0034F8  1002               3420+      JOFF  INTET                    BCH IF NOT EXPECTED             IL
0034FA  F304               3421+      CBI   4,R3                     IS THIS AN 'ATTENTION' INTR     IL
0034FC  1006               3422+      JE    INTR1                    * YES, BCH TO END INTR SEQUENCE IL
0034FE  4C61               3423+INTET TBTS  (R4,ER)                  SET ERROR ON I/O COMMAND CNTL BIT IL
003500  5004               3424+      J     INTR1                                                   IL
                           3425+*                                    THE ERROR INTERRUPT USES THE SAME IL
                           3426+*                                    ENDING SEQUENCE AS THE NORMAL INTR IL
                           3428+*************************************************************14APR76IL
                           3429+*                                                                    IL
                           3430+* SOUBROUTINE                                                       IL
                           3431+*                                                                    IL
                           3432+*     OKAY  INTERRUPT               RUNS ON INTERRUPT LEVEL '$INTL' IL
                           3433+*                                                                    IL
                           3434+* PURPOSE                                                          IL
                           3435+*                                                                    IL
                           3436+*     TO CHECK THE INTERRUPT AND CONTINUE THE TEST                   IL
                           3437+*                                                                    IL
                           3438+* CALLING SEQUENCE                                                 IL
                           3439+*                                                                    IL
                           3440+*     SUPERVISOR WILL ENTER HERE  IF INTR CC IS AS REQUESTED         IL
                           3441+*     THE ERROR INTERRUPT HANDLER WILL BRANCH TO THIS ROUTINE        IL
                           3442+*     AFTER THE SPECIAL PART HAS BEEN COMPLETED  AND THE             IL
                           3443+*     COMMON SECTION IS HANDLED HERE.                                IL
                           3444+*                                                                    IL
                           3445+* RETURN CONTROL                                                    IL
                           3446+*                                                                    IL
                           3447+*     SVC   EXIT                    RETURN TO USER VIA SUPVR        IL
                           3448+*                                                                    IL
                           3449+*************************************************************************IL
003502  706E               3450+INTOK CPLSR R3                       COPY STATUS ANY LEVEL INTO R3   IL
003504  336A               3451+      SRL   13,R3                    POSITION INDICATORS IN R3       IL
003506  4424  31F8         3452+      MVA   OPTN1,R4                 SET UP BASE ADRS                IL
00350A  4C63               3453+INTR1 TBTS  (R4,IN)                  SET   INTERRUPT RECEIVED        IL
00350C  4C28               3454+      TBT   (R4,CS)                  IS 'CS IN PROGRESS' ON          IL
00350E  1204               3455+      JON   INTR2                    * YES, BCH  AROUND UPDATE       IL
003510  C328  3201         3456+      MVB   R3,$IOIN+1               SAVE INTERRUPTING CC CODE       IL
003514  6F0D  3202         3457+      MVW   R7,$ISB                  SAVE INTR STATUS AND DEV ADRS   IL
003518                     3458+INTR2 EQU   *                                                       IL
                           3459+*     CPCL  R5                       CURRENT LEVEL COPIED BY DCP     IL
003518  3521               3460+      SLL   4,R5                     POSITION INTR LEVEL AND PUT     IL
00351A  0501               3461+      ABI   1,R5                     * IN 'II' BIT                   IL
00351C  CD24  323E         3462+      CW    $INTL,R5                 IS THIS  THE  CORRECT INTR LEVEL IL
003520  1002               3463+      JE    INTR3                    * YES,  GO  EXIT  THIS LEVEL    IL
003522  4C66               3464+      TBTS  (R4,$LE)                 SET INTR LEVEL ERROR CONTROL BIT IL
003524  4C61               3465+      TBTS  (R4,ER)                  SET ERROR ON I/O COMMAND CNTL BIT IL
003526  4CA2               3466+INTR3 TBTR  (R4,XI)                  WAS INTERRUPT EXPECTED          IL
003528  1204               3467+      JON   INTRX                    * YES,  EXIT OFF THIS INTR LEVEL IL
00352A  4C60               3468+      TBTS  (R4,MI)                  * NO,  SET MYSTERY INTR CONTROL BIT IL
00352C  F304               3469+      CBI   4,R3                     ATTENTION INTERRUPT?            IL
00352E  1001               3470+      JE    INTRX                    YES                             IL
003530  4C6C               3471+      TBTS  (R4,NG)                  ERROR,UNEXPECTED INTERRUPT      IL
003532  6006               3472+INTRX SVC   EXIT                     EXIT THIS LEVEL VIA SUPVR TO PGM IL
                           3474+*************************************************************03FEB76**
                           3475+*
                           3476+*     THIS IS THE CONTINUATION OF EXECUTE I/O AFTER THE INTERRUPT
                           3477+*     HAS BEEN SERVICED. THE EXERCISER FINDS AN INTERRUPT HAS BEEN
                           3478+*     RECEIVED AND BRANCHES HERE TO CHECK FOR ANY ERROR CONDITIONS.
                           3479+*
                           3480+*
003534  4CA4               3481+XIOCK TBTR  (R4,XE)                  WAS AN ERROR EXPECTED
003536  6AC0  0002         3482+      BN    (R6,2)                   * YES,  EXIT THIS ROUTINE
00353A  4CA8               3483+      TBTR  (R4,CS)                  WAS AUTO CS IN PROGRESS
00353C  1006               3484+      JOFF  XIOCV                    * NO,  CONTINUE CHECKING
00353E  4C2A               3485+      TBT   (R4,CE)                  IS CS IN AN ERR CONDITION
003540  1002               3486+      JOFF  XIOCO                    * NO,  BCH
003542  68D2  0000         3487+      B     (R6)*                    CS ERROR
003546  4C69               3488+XIOCO TBTS  (R4,CSA)                 TURN ON CS STATS AVAIL FLAG
003548  5601               3489+      BXS   (R6,2)                   GO TO USER
00354A  4C21               3490+XIOCV TBT   (R4,ER)                  WAS ERROR INTR CONTROL BIT ON
00354C  100D               3491+      JOFF  XIOCX                    * NO,  EXIT THIS ROUTINE
                           3492+*
00354E  C520  3201         3493+      MVB   $IOIN+1,R5               GET LAST INTR CC CODE
003552  F502               3494+      CBI   2,R5                     IS THIS CC=2
003554  1003               3495+      JE    XIOCQ                    YES
003556  F506               3496+      CBI   6,R5                     IS THIS CC=6
003558  68D1  0000         3497+      BNE   (R6)*                    * NO,  BCH  TO ERROR HANDLER
00355C  C520  3202         3498+XIOCQ MVB   $ISB,R5                  GET LAST ISB DATA BYTE AND IF CS
003560  6A00  346E         3499+      BN    XIOCS-4                  * AVAILABLE,  GO AND GET IT
003564  68D2  0000         3500+      B     (R6)*                    ERROR
003568  CB25  31FC         3501+XIOCX MVWZ  OPTN3,R3                 CLEAR OUT OPTION 3 CNTL BITS
00356C  5601               3502+      BXS   (R6,2)                   RETURN TO USER VIA REG 6
                           3503+*
                           3504+*               I/O   PARAMETER LIST
                           3505+*
00356E  19D0               3506+IOBLK DC    A(DEVADD)                ADRS OF DEVICE ADRS
003570  34D2               3507+      DC    A(XIOER)                 ERROR ROUTINE ADRS
003572  0000               3508+IODCB DC    A(*-*)                   DCB ADRS OR LEVEL & INTR
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 LOCTR  OBJECT TEXT        STMT SOURCE STATEMENT                    COPYRIGHT IBM CORP 1976

003574  0000               3509+IOMOD DC    A(*-*)                   MODIFIER
003576  0000               3510+      DC    A(*-*)                   ADRS OF LAST SVC CALL
003578  0000               3511+IORSP DC    A(*-*)                   SECOND WORD OF LAST IDCB
                           3512+*
                           3513+*               INTERRUPT CONTROL BLOCK FOR I/O COMMANDS
                           3514+*
00357A  19D0               3515+INTBL DC    A(DEVADD)                ADRS OF DEVICE ADRS
00357C  3502               3516+      DC    A(INTOK)                 INTERRUPT OK RETURN ADRS
00357E  34DE               3517+      DC    A(INTER)                 INTERRUPT ERROR ADRS
003580  0003               3518+INTCC DC    X'0003'                  INTERRUPT CODE EXPECTED
                           3520+*************************************************************11MAY76**
                           3521+*
                           3522+* SUBROUTINE
                           3523+*
                           3524+*     CONNECT INTERRUPT CONTROL BLOCK & PREPARE DEVICE
                           3525+*
                           3526+* PURPOSE
                           3527+*
                           3528+*     TO CONNECT THE INTERRUPT CONTROL BLOCK TO THIS DEVICE AND
                           3529+*     PREPARE ON THE DESIRED INTERRUPT LEVEL AND TO ALLOW THE DEVICE
                           3530+*     TO INTERRUPT.
                           3531+*
                           3532+* CALLING SEQUENCE
                           3533+*
                           3534+*     THIS SUBROUTINE HAS THE FOLLOWING ENTRIES:
                           3535+*
                           3536+* --> BAL   $CONC,R6                 CLEAR DEV DEP STG AND CONNECT I/O BLK
                           3537+* --> BAL   $CONP,R6                 PREPARE DEVICE ONLY, ALREADY CONNECT
                           3538+*
                           3539+* RETURN CONTROL
                           3540+*
                           3541+*     BXS   (R6,2)                   RETURN TO USER VIA REG 6 IF OKAY
                           3542+* OR  B     (R6)*                    IF THE DEVICE COULD NOT BE CONNECTED
                           3543+*
                           3544+*************************************************************************
003582  0F06               3545+$CONC MVBI  6,R7                     NUMBER OF BYTE TO CLEAR
003584  0B00               3546+      MVBI  0,R3                     * AND THE DATA TO USE
003586  4524  3206         3547+      MVA   DEV1,R5                  * ALONG WITH THE ADRS TO USE
00358A  2BAC               3548+      TFM   R3,(R5)                  *
00358C  CB25  31FC         3549+      MVWZ  OPTN3,R3                 CLEAR OLD CONTROLS FOR NEW ROUTINE
003590  4724  357A         3550+      MVA   INTBL,R7                 SET R7 TO CONTROL BLOCK AND
003594  6014               3551+      SVC   CICB                     * CONNECT IT TO THIS DEVICE
003596  6AD0  0000         3552+      BN    (R6)*                    ERROR RETURN TO USER
                           3553+*
00359A  8828  323E  3572   3554+$CONP MVW   $INTL,IODCB              PUT IN LEVEL & INTR PARAMETER
0035A0  4724  356E         3555+      MVA   IOBLK,R7                 SET R7 TO CONTROL BLOCK TO PREPARE
0035A4  4020  3200  0708   3556+      MVWI  X'0708',$IOIN            INITIALIZE CONDITION CODE STORAGE
0035AA  CB25  3202         3557+      MVWZ  $ISB,R3                  * AND CLEAR OLD ISB VALUE
0035AE  6E0D  3204         3558+      MVW   R6,LSTIO                 SET UP ADDRESS THAT STARTED LAST I/O
0035B2  600C               3559+      SVC   PREP                     * AND CALL ON SUPVR
0035B4  5601               3560+      BXS   (R6,2)                   RETURN TO USER
                           3562+*************************************************************06APR76**
                           3563+*
                           3564+* SUBROUTINE
                           3565+*
                           3566+*     DISCONNECT THE INTERRUPT CONTROL BLOCK AND LOG ERRORS
                           3567+*
                           3568+* PURPOSE
                           3569+*
                           3570+*     DISCONNECT THE INTERRUPT CONTROL BLOCK TO THIS DEVICE AND
                           3571+*     SET THE 'NO GOOD' CONTROL BIT, THEN LOG THE  DATA THAT HAS
                           3572+*     BEEN FOUND TO HELP THE OPERATOR DEFINE THE ERROR CONDITION.
                           3573+*
                           3574+* CALLING SEQUENCE
                           3575+*
                           3576+*     THIS SUBROUTINE HAS THE FOLLOWING ENTRIES:
                           3577+*
                           3578+* --> B     $ERR$                    SET 'NG' BIT AND CONVERT DATA TO LOG
                           3579+* --> B     $CONX                    RETURN TO MDI SUPERVISOR TO TEST STS
                           3580+*
                           3581+* RETURN CONTROL
                           3582+*
                           3583+*     B     TURTN*                   RETURN TO MDI
                           3584+* OR  B     (R6)*                    IF THE DEVICE COULD NOT BE CONNECTED
                           3585+*
                           3586+*************************************************************************
0035B6  4020  1818  8000   3587+$ERR$  MVWI  X'8000',TUSTATUS         SET ON 'NO GOOD' STATUS BIT
0035BC  4724  3786         3588+      MVA   HEBLK,R7                 GET ADRS OF CONTROL BLOCK
0035C0  601A               3589+      SVC   HTOE                     CONVERT HEX TO EBC VIS DCP
0035C2  4020  188E  4040   3590+      MVWI  X'4040',TUWORK+116
0035C8  4020  1890  4040   3591+      MVWI  X'4040',TUWORK+118
0035CE  4020  1892  4040   3592+      MVWI  X'4040',TUWORK+120
0035D4  0D04               3593+$PRNT MVBI  4,R5
0035D6  4324  181A         3594+      MVA   TUWORK,R3                SET UP BUFFER STORAGE
0035DA  6B0D  377E         3595+      MVW   R3,BUFPT
0035DE  4124  365A         3596+      MVA   LINE1,R1
0035E2  0F04               3597+      MVBI  4,R7
0035E4  0E08               3598+      MVBI  8,R6
0035E6  2B24               3599+MVBUF MVFN  (R3),(R1)
0035E8  0F04               3600+      MVBI  4,R7
0035EA  0A40               3601+      MVBI  X'40',R2
0035EC  C258               3602+      MVB   R2,(R1)+
0035EE  BEFB               3603+      JCT   MVBUF,R6
0035F0  0E08               3604+      MVBI  8,R6
0035F2  7921  002C         3605+      AWI   44,R1
0035F6  BDF7               3606+      JCT   MVBUF,R5
0035F8  4020  1802  F1F0   3607+      MVWI  PIDMSG10,PID+2
0035FE  4020  19B8  3784   3608+      MVA   FAKETU,@DCADD1
003604  4020  19BA  3780   3609+      MVA   DC2PT,@DCADD2
00360A  402C  19C4  0080   3610+      OWI   BIT0080,SUPSTAT
003610  4324  31FE         3611+      MVA   $TUID,R3                 SET UP BUFFER STORAGE
003614  6F13  18BA         3612+      BAL   TUMSG#TR*,R7             GO TO MESSAGE WRITER
003618                     3613+*
003618  C720  19D0         3614+$CONX EQU   *
                           3615+      MVB   DEVADD,R7                GET DEVICE ADDRESS FROM MDI
00361C  6013               3616+      SVC   RICB                     RELEASE INTERRUPT CONTROL BLOCK
00361E  6812  3240         3617+      B     TURTN*                   RETURN TO MDI SUPERVISOR
                           3618+*
003622  0009               3619+BEGIN DC    A(0009)                  NUMBER OF LINES TO PRINT
003624  0008               3620+      DC    A(0008)                  LINE LENGTH = 8 CHAR
003626  5C5C40C1C2D6D9E3   3621+      DC    C'** ABORT'
00362E  0028               3622+      DC    A(0040)                  LINE LENGTH = 40 CHAR
003630  E3E4C9C440C9D6C9D  3623+      DC    C'TUID IOIN ISB  INST SECT  ID  DATA CSCC '
003658  0028               3624+      DC    A(0040)                  LINE LENGTH = 40 CHAR
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 LOCTR   OBJECT TEXT      STMT SOURCE STATEMENT                                  COPYRIGHT IBM CORP 1976
00365A  40404040404040404 3625+LINE1  DC    C'                                                '
003682  0028              3626+        DC    A(0040)                    LINE LENGTH = 40 CHAR
003684  C3D5E3D340C4C3C2F 3627+        DC    C'CNTL DCB1 DCB2 DCB3 DCB4 CHAD BYCT ADRS '
0036AC  0028              3628+        DC    A(0040)                    LINE LENGTH = 40 CHAR
0036AE  40404040404040404 3629+LINE2  DC    C'                                                '
0036D6  0028              3630+        DC    A(0040)                    LINE LENGTH = 40 CHAR
0036D8  C3E260F040C3E260F 3631+        DC    C'CS-0 CS-1 CS-2 CS-3 CS-4 CS-5 CS-6 CS-7 '
003700  0028              3632+        DC    A(0040)                    LINE LENGTH = 40 CHAR
003702  40404040404040404 3633+LINE3  DC    C'                                                '
00372A  0028              3634+        DC    A(0040)                    LINE LENGTH = 40 CHAR
00372C  C3E260F840C3E260F 3635+        DC    C'CS-8 CS-9 CS-A CS-B CS-C '
003754  0028              3636+        DC    A(0040)                    LINE LENGTH = 40 CHAR
003756  40404040404040404 3637+LINE4  DC    C'                                                '
                          3638+*
00377E  0000              3639+BUFPT   DC    A(*-*)
003780  3622              3640+DC2PT   DC    A(BEGIN)
003782  0101              3641+FIXTU   DC    X'0101'
003784  0101              3642+FAKETU  DC    X'0101'
00F1F0                    3643+PIDHSG10 EQU   X'F1F0'
000080                    3644+BIT0080  EQU   X'0080'
                          3645+*
                          3646+*      DATA CONTROL BLOCK FOR CONVERTING HEX TO EBCDIC
                          3647+*
003786  003A              3648+HEBLK   DC    A(58)                      NUMBER OF BYTES TO CONVERT
003788  31FE              3649+        DC    A($TUID)                   FROM ADRS
00378A  181A              3650+        DC    A(TUWORK)                  AND THE TO ADRS
                          3651         COPY  T7A10                      23JAN78
                          3652 T7A10 TUIT
                          3653+**************************************************************06FEB76**
                          3654+*
                          3655+* TEST UNIT
                          3656+*
                          3657+*      ERROR HALT CODE/DIAG SENSE BYTE CHECK
                          3658+*
                          3659+* PURPOSE
                          3660+*
                          3661+*      TO MOVE THE ERROR HALT CODE, STATUS BYTE, AND DIAG BYTES 1,2 3
                          3662+*      TO THE TU RESULTS BUFFER (TURESUL).
                          3663+*      .
                          3664+*      MDI=$TUXX,T7A10,01,0708,EQ
                          3665+*
                          3666+*      TURESUL BIT(S) 0-7  ........ ERROR HALT CODE
                          3667+*                     8-15 ........ STATUS (SENSE) BYTE
                          3668+*                    16-23 ........ SINGLE SHOT BYTE 1 (5-HURSLEY)
                          3669+*                    24-31 ........ SINGLE SHOT BYTE 2 (6-HURSLEY)
                          3670+*                    32-39 ........ SINGLE SHOT BYTE 3 (7-HURSLEY)
                          3671+*                    48-55 ........ NOT USED
                          3672+*                    56-63 ........ MULTISAMPLE BYTE 1 (5-HURSLEY)
                          3673+*                    64-71 ........ MULTISAMPLE BYTE 2 (6-HURSLEY)
                          3674+*                    72-79 ........ MULTISAMPLE BYTE 3 (7-HURSLEY)
                          3675+*                    80-87 ........ WRAP BYTE
                          3676+*
                          3677+* CALLING SEQUENCE
                          3678+*
                          3679+       MVW   TUWORK,TURESUL           MOVE ERROR HALT CODE & STATUS BYTES
                          3680+       MVD   TUWORK+6,TURESUL+2       SINGLE SHOT BYTES 1, 2, AND 3
                          3681+       MVD   TUWORK+10,TURESUL+6      MULTISAMPLE BYTES 1, 2, AND 3
                          3682+*                                     AND WRAP BYTE
                          3683+* RETURN CONTROL
                          3684+*
                          3685+*      B     TURTN*                   RETURN TO MDI SUPERVISOR
                          3686+*
                          3687+**************************************************************************
00378C  6F0D 3240         3688+T7A10   MVW   R7,TURTN                 SAVE RETURN ADDRESS
003790  4020 31FE 7A10     3689+        MVWI  X'7A10',$TUID           SAVE TU ID FOR DISPLAY
003796  4424 31F8         3690+        MVA   OPTN1,R4                SET UP POINTER ADRS IN R4
00379A  6E03 3582         3691+        BAL   $CONC,R6                CLEAR DEV DEP STG AND CONNECT I/O BL
00379E  35B6              3692+        DC    A($ERR$)                ERROR ADRS FOR INVALID PREP
                          3693+*
0037A0  9028 181C 18D2    3694         MVD   TUWORK+2,TURESUL+10     MOVE ERROR WORDS 4,5
0037A6  8028 1827 18CD    3695         MVB   TUWORK+13,TURESUL+5     MOVE WRAP CHECK RESULTS
                          3696         TXIT
0037AC  6802 3618         3697+        B     $CONX                   RETURN TO MDI CONTROLLER
                          3698+**************************************************************************
000000                    3700         END
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CROSS-REFERENCE LISTING — COPYRIGHT IBM CORP 1976

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DECLARED  NAME      ATTRIBUTES AND REFERENCES
  3545    $CONC      ADDRESS. HEX LOCATION(00003582) IN CSECT(I7A28   ) LENGTH(2)
                     3691
  3614    $CONX      ADDRESS. HEX LOCATION(00003618) IN CSECT(I7A28   ) LENGTH(1)
                     3697
  3587    $ERR$      ADDRESS. HEX LOCATION(000035B6) IN CSECT(I7A28   ) LENGTH(6)
                     3692
  2251    $INTL      ADDRESS. HEX LOCATION(0000323E) IN CSECT(I7A28   ) LENGTH(2)
                     3462  3554
  2216    $IOIN      ADDRESS. HEX LOCATION(00003200) IN CSECT(I7A28   ) LENGTH(2)
                     2651  3316  3376  3456  3493  3556
  2217    $ISB       ADDRESS. HEX LOCATION(00003202) IN CSECT(I7A28   ) LENGTH(2)
                     2652  3317  3457  3498  3557
  2201    $LE        ABSOLUTE. HEX VALUE(00000026)
                     3322  3464
  2215    $TUID      ADDRESS. HEX LOCATION(000031FE) IN CSECT(I7A28   ) LENGTH(2)
                     2261  3611  3649  3689
  2664    $WRT1      ADDRESS. HEX LOCATION(0000343A) IN CSECT(I7A28   ) LENGTH(2)
                     2661
   102    @DCADD1    ADDRESS. HEX LOCATION(000019B8) IN CSECT(I7A28   ) LENGTH(1)
                     3608
   103    @DCADD2    ADDRESS. HEX LOCATION(000019BA) IN CSECT(I7A28   ) LENGTH(1)
                     3609
    39    @FIXT      ABSOLUTE. HEX VALUE(00000101)
                      933   948   999  1002  1005  1008  1011  1026  1041
                     1044  1047  1062  1065  1116  1131  1134  1161  1164
                     1167  1170  1185  1188  1215  1242  1245  1260  1263
                     1266  1305  1320  1323  1362  1365  1380  1383  1386
                     1389  1440  1443  1458  1473  1488  1491  1506  1533
                     1548  1551  1566  1581  1584  1635  1650  1653  1680
                     1683  1698  1701  1740  1743  1746  1797  1800  1803
                     1806  1809  1836  1839  1878  1905  1908  1911  1914
                     1929  1932  1971  1974  1989  1992  2019  2022  2049
                     2064  2067  2070
    45    @TUXX      ABSOLUTE. HEX VALUE(00000500)
                      825   837   849   861   873   885   897   909   921
                      936   951   963   975   987  1014  1029  1050  1068
                     1080  1092  1104  1119  1137  1149  1173  1191  1203
                     1218  1230  1248  1269  1281  1293  1308  1326  1338
                     1350  1368  1392  1404  1416  1428  1446  1461  1476
                     1494  1509  1521  1536  1554  1569  1587  1599  1611
                     1623  1638  1656  1668  1686  1704  1716  1728  1749
                     1761  1773  1785  1812  1824  1842  1854  1866  1881
                     1893  1917  1935  1947  1959  1977  1995  2007  2025
                     2037  2052
  3619    BEGIN      ADDRESS. HEX LOCATION(00003622) IN CSECT(I7A28   ) LENGTH(2)
                     3640
  3644    BIT0080    ABSOLUTE. HEX VALUE(00000080)
                     3610
  3639    BUFPT      ADDRESS. HEX LOCATION(0000377E) IN CSECT(I7A28   ) LENGTH(2)
                     3595
  2205    CE         ABSOLUTE. HEX VALUE(0000002A)
                     3301  3415  3485
  2290    CICB       ABSOLUTE. HEX VALUE(00000014)
                     3551
  2387    CLDCB      ADDRESS. HEX LOCATION(00003260) IN CSECT(I7A28   ) LENGTH(2)
                     2593
  2203    CS         ABSOLUTE. HEX VALUE(00000028)
                     3302  3305  3413  3454  3483
  2204    CSA        ABSOLUTE. HEX VALUE(00000029)
                     3488
  2234    CSBUF      ADDRESS. HEX LOCATION(0000321E) IN CSECT(I7A28   ) LENGTH(1)
                     2432  2645  3313
  2425    CSDCB      ADDRESS. HEX LOCATION(000032A0) IN CSECT(I7A28   ) LENGTH(2)
                     3303
  2224    DCBUF      ADDRESS. HEX LOCATION(0000320E) IN CSECT(I7A28   ) LENGTH(1)
                     2648  3308
  3640    DC2PT      ADDRESS. HEX LOCATION(00003780) IN CSECT(I7A28   ) LENGTH(2)
                     3609
   105    DEVADD     ADDRESS. HEX LOCATION(000019D0) IN CSECT(I7A28   ) LENGTH(1)
                     2254  3506  3515  3615
  2219    DEV1       ADDRESS. HEX LOCATION(00003206) IN CSECT(I7A28   ) LENGTH(2)
                     2223  3547
  2222    DEV4       ADDRESS. HEX LOCATION(0000320C) IN CSECT(I7A28   ) LENGTH(2)
                     3416  3417
  2376    DGDCB      ADDRESS. HEX LOCATION(00003250) IN CSECT(I7A28   ) LENGTH(2)
                     2640
    67    DUMMY      ABSOLUTE. HEX VALUE(00000000)
                      816  2072  2084
  2073    ENTPT      ADDRESS. HEX LOCATION(0000309E) IN CSECT(I7A28   ) LENGTH(1)
                      198
  2196    ER         ABSOLUTE. HEX VALUE(00000021)
                     2654  3319  3340  3423  3465  3490
  2276    EXIT       ABSOLUTE. HEX VALUE(00000006)
                     3472
  3642    FAKETU     ADDRESS. HEX LOCATION(00003784) IN CSECT(I7A28   ) LENGTH(2)
                     3608
  2130    F00045     ADDRESS. HEX LOCATION(00003184) IN CSECT(I7A28   ) LENGTH(1)
                     1474  1492  1507  1636  1651  1699  1702  1837  1933
  2154    F00046     ADDRESS. HEX LOCATION(000031EA) IN CSECT(I7A28   ) LENGTH(1)
                     1990  2065  2071
  2092    F00047     ADDRESS. HEX LOCATION(000030A4) IN CSECT(I7A28   ) LENGTH(1)
                      934   949  1000  1027  1042  1048  1063  1132  1162
                     1186  1216  1243  1366  1381  1567  1585  1879  1915
  2146    F00048     ADDRESS. HEX LOCATION(000031CE) IN CSECT(I7A28   ) LENGTH(1)
                     1807  1810
  2112    F00049     ADDRESS. HEX LOCATION(00003120) IN CSECT(I7A28   ) LENGTH(1)
                     1135  1171  1246  1261  1306  1324  1363  1384  1387
                     1459  1534
  2134    F00050     ADDRESS. HEX LOCATION(00003192) IN CSECT(I7A28   ) LENGTH(1)
                     1489
  2108    F00051     ADDRESS. HEX LOCATION(00003112) IN CSECT(I7A28   ) LENGTH(1)
                     1117  1165  1168  1582  1909  1930
  2150    F00052     ADDRESS. HEX LOCATION(000031DC) IN CSECT(I7A28   ) LENGTH(1)
                     1975
  2120    F00053     ADDRESS. HEX LOCATION(0000313C) IN CSECT(I7A28   ) LENGTH(1)
                     1390
  2116    F00054     ADDRESS. HEX LOCATION(0000312E) IN CSECT(I7A28   ) LENGTH(1)
                     1321
  2142    F00055     ADDRESS. HEX LOCATION(000031C0) IN CSECT(I7A28   ) LENGTH(1)
                     1741
  2100    F00057     ADDRESS. HEX LOCATION(000030D2) IN CSECT(I7A28   ) LENGTH(1)
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CROSS-REFERENCE LISTING

DECLARED	NAME	ATTRIBUTES AND REFERENCES
		1009 1012 1045 1264 1444 1549 1798 1993 2050 2068
2104	F00058	ADDRESS. HEX LOCATION(000030F2) IN CSECT(I7A28) LENGTH(1) 1066 2020
2138	F00059	ADDRESS. HEX LOCATION(000031A0) IN CSECT(I7A28) LENGTH(1) 1684 1801 1804 2023
2096	F00060	ADDRESS. HEX LOCATION(000030B2) IN CSECT(I7A28) LENGTH(1) 1003 1006 1189 1267 1552 1654 1681 1744 1747 1840 1906 1912
2124	F00063	ADDRESS. HEX LOCATION(0000314A) IN CSECT(I7A28) LENGTH(1) 1441 1972
3648	HEBLK	ADDRESS. HEX LOCATION(00003786) IN CSECT(I7A28) LENGTH(2) 3588
2296	HTOE	ABSOLUTE. HEX VALUE(0000001A) 3589
2272	IDLE	ABSOLUTE. HEX VALUE(00000002) 3334 3336
2517	ID00	ADDRESS. HEX LOCATION(0000333A) IN CSECT(I7A28) LENGTH(2) 2498 2606
2198	IN	ABSOLUTE. HEX VALUE(00000023) 2653 3320 3332 3453
3515	INTBL	ADDRESS. HEX LOCATION(0000357A) IN CSECT(I7A28) LENGTH(2) 3550
3410	INTER	ADDRESS. HEX LOCATION(000034DE) IN CSECT(I7A28) LENGTH(2) 3517
3419	INTES	ADDRESS. HEX LOCATION(000034F6) IN CSECT(I7A28) LENGTH(2) 3414
3423	INTET	ADDRESS. HEX LOCATION(000034FE) IN CSECT(I7A28) LENGTH(2) 3420
3450	INTOK	ADDRESS. HEX LOCATION(00003502) IN CSECT(I7A28) LENGTH(2) 3516
3472	INTRX	ADDRESS. HEX LOCATION(00003532) IN CSECT(I7A28) LENGTH(2) 3467 3470
3453	INTR1	ADDRESS. HEX LOCATION(0000350A) IN CSECT(I7A28) LENGTH(2) 3418 3422 3424
3458	INTR2	ADDRESS. HEX LOCATION(00003518) IN CSECT(I7A28) LENGTH(1) 3455
3466	INTR3	ADDRESS. HEX LOCATION(00003526) IN CSECT(I7A28) LENGTH(2) 3463
3506	IOBLK	ADDRESS. HEX LOCATION(0000356E) IN CSECT(I7A28) LENGTH(2) 2656 3321 3555
3508	IODCB	ADDRESS. HEX LOCATION(00003572) IN CSECT(I7A28) LENGTH(2) 2590 2593 2596 2604 2615 2618 2621 2624 2632 2636 2640 2667 2670 3303 3309 3554
3509	IOMOD	ADDRESS. HEX LOCATION(00003574) IN CSECT(I7A28) LENGTH(2) 2657 2658 3295 3298 3304
37	I7A28	CSECT. START(00002500) LENGTH(4784) ESDID(1) 37
3625	LINE1	ADDRESS. HEX LOCATION(0000365A) IN CSECT(I7A28) LENGTH(40) 3596
2218	LSTIO	ADDRESS. HEX LOCATION(00003204) IN CSECT(I7A28) LENGTH(2) 2643 3307 3558
2195	MI	ABSOLUTE. HEX VALUE(00000020) 3468
3599	MVBUF	ADDRESS. HEX LOCATION(000035E6) IN CSECT(I7A28) LENGTH(2) 3603 3606
2207	NG	ABSOLUTE. HEX VALUE(0000002C) 3471
2202	NI	ABSOLUTE. HEX VALUE(00000027) 3326
825	N00001	ADDRESS. HEX LOCATION(000027A0) IN CSECT(I7A28) LENGTH(2) 315 2083
837	N00002	ADDRESS. HEX LOCATION(000027B2) IN CSECT(I7A28) LENGTH(2) 318
849	N00003	ADDRESS. HEX LOCATION(000027CC) IN CSECT(I7A28) LENGTH(2) 321
861	N00004	ADDRESS. HEX LOCATION(000027E6) IN CSECT(I7A28) LENGTH(2) 324
873	N00005	ADDRESS. HEX LOCATION(000027FE) IN CSECT(I7A28) LENGTH(2) 327
885	N00006	ADDRESS. HEX LOCATION(00002816) IN CSECT(I7A28) LENGTH(2) 330
897	N00007	ADDRESS. HEX LOCATION(00002830) IN CSECT(I7A28) LENGTH(2) 333
909	N00008	ADDRESS. HEX LOCATION(0000284A) IN CSECT(I7A28) LENGTH(2) 336
921	N00009	ADDRESS. HEX LOCATION(00002864) IN CSECT(I7A28) LENGTH(2) 339
933	N00010	ADDRESS. HEX LOCATION(0000287C) IN CSECT(I7A28) LENGTH(2) 342
936	N00011	ADDRESS. HEX LOCATION(00002880) IN CSECT(I7A28) LENGTH(2) 345 922
948	N00012	ADDRESS. HEX LOCATION(0000289A) IN CSECT(I7A28) LENGTH(2) 348
951	N00013	ADDRESS. HEX LOCATION(0000289E) IN CSECT(I7A28) LENGTH(2) 351 937
963	N00014	ADDRESS. HEX LOCATION(000028B6) IN CSECT(I7A28) LENGTH(2) 354
975	N00015	ADDRESS. HEX LOCATION(000028D0) IN CSECT(I7A28) LENGTH(2) 357
987	N00016	ADDRESS. HEX LOCATION(000028E8) IN CSECT(I7A28) LENGTH(2) 360
999	N00017	ADDRESS. HEX LOCATION(00002900) IN CSECT(I7A28) LENGTH(2) 363
1002	N00018	ADDRESS. HEX LOCATION(00002904) IN CSECT(I7A28) LENGTH(2) 366 988
1005	N00019	ADDRESS. HEX LOCATION(00002908) IN CSECT(I7A28) LENGTH(2) 369 976
1008	N00020	ADDRESS. HEX LOCATION(0000290C) IN CSECT(I7A28) LENGTH(2) 372 964
1011	N00021	ADDRESS. HEX LOCATION(00002910) IN CSECT(I7A28) LENGTH(2) 375 952
1014	N00022	ADDRESS. HEX LOCATION(00002914) IN CSECT(I7A28) LENGTH(2) 378 910
1026	N00023	ADDRESS. HEX LOCATION(0000292C) IN CSECT(I7A28) LENGTH(2) 381
1029	N00024	ADDRESS. HEX LOCATION(00002930) IN CSECT(I7A28) LENGTH(2) 384 1015
1041	N00025	ADDRESS. HEX LOCATION(0000294A) IN CSECT(I7A28) LENGTH(2) 387
1044	N00026	ADDRESS. HEX LOCATION(0000294E) IN CSECT(I7A28) LENGTH(2)

CROSS-REFERENCE LISTING

DECLARED	NAME	ATTRIBUTES AND REFERENCES
		390 1030
1047	N00027	ADDRESS. HEX LOCATION(00002952) IN CSECT(I7A28) LENGTH(2) 393 898
1050	N00028	ADDRESS. HEX LOCATION(00002956) IN CSECT(I7A28) LENGTH(2) 396 886
1062	N00029	ADDRESS. HEX LOCATION(00002968) IN CSECT(I7A28) LENGTH(2) 399
1065	N00030	ADDRESS. HEX LOCATION(0000296C) IN CSECT(I7A28) LENGTH(2) 402 1051
1068	N00031	ADDRESS. HEX LOCATION(00002970) IN CSECT(I7A28) LENGTH(2) 405 874
1080	N00032	ADDRESS. HEX LOCATION(00002988) IN CSECT(I7A28) LENGTH(2) 408
1092	N00033	ADDRESS. HEX LOCATION(000029A2) IN CSECT(I7A28) LENGTH(2) 411
1104	N00034	ADDRESS. HEX LOCATION(000029B4) IN CSECT(I7A28) LENGTH(2) 414
1116	N00035	ADDRESS. HEX LOCATION(000029CE) IN CSECT(I7A28) LENGTH(2) 417
1119	N00036	ADDRESS. HEX LOCATION(000029D2) IN CSECT(I7A28) LENGTH(2) 420 1105
1131	N00037	ADDRESS. HEX LOCATION(000029E4) IN CSECT(I7A28) LENGTH(2) 423
1134	N00038	ADDRESS. HEX LOCATION(000029E8) IN CSECT(I7A28) LENGTH(2) 426 1120
1137	N00039	ADDRESS. HEX LOCATION(000029EC) IN CSECT(I7A28) LENGTH(2) 429 1093
1149	N00040	ADDRESS. HEX LOCATION(00002A04) IN CSECT(I7A28) LENGTH(2) 432
1161	N00041	ADDRESS. HEX LOCATION(00002A1C) IN CSECT(I7A28) LENGTH(2) 435
1164	N00042	ADDRESS. HEX LOCATION(00002A20) IN CSECT(I7A28) LENGTH(2) 438 1150
1167	N00043	ADDRESS. HEX LOCATION(00002A24) IN CSECT(I7A28) LENGTH(2) 441 1138
1170	N00044	ADDRESS. HEX LOCATION(00002A28) IN CSECT(I7A28) LENGTH(2) 444 1081
1173	N00045	ADDRESS. HEX LOCATION(00002A2C) IN CSECT(I7A28) LENGTH(2) 447 1069
1185	N00046	ADDRESS. HEX LOCATION(00002A3E) IN CSECT(I7A28) LENGTH(2) 450
1188	N00047	ADDRESS. HEX LOCATION(00002A42) IN CSECT(I7A28) LENGTH(2) 453 1174
1191	N00048	ADDRESS. HEX LOCATION(00002A46) IN CSECT(I7A28) LENGTH(2) 456 862
1203	N00049	ADDRESS. HEX LOCATION(00002A5E) IN CSECT(I7A28) LENGTH(2) 459
1215	N00050	ADDRESS. HEX LOCATION(00002A76) IN CSECT(I7A28) LENGTH(2) 462
1218	N00051	ADDRESS. HEX LOCATION(00002A7A) IN CSECT(I7A28) LENGTH(2) 465 1204
1230	N00052	ADDRESS. HEX LOCATION(00002A92) IN CSECT(I7A28) LENGTH(2) 468
1242	N00053	ADDRESS. HEX LOCATION(00002AAC) IN CSECT(I7A28) LENGTH(2) 471
1245	N00054	ADDRESS. HEX LOCATION(00002AB0) IN CSECT(I7A28) LENGTH(2) 474 1231
1248	N00055	ADDRESS. HEX LOCATION(00002AB4) IN CSECT(I7A28) LENGTH(2) 477 1219
1260	N00056	ADDRESS. HEX LOCATION(00002ACE) IN CSECT(I7A28) LENGTH(2) 480
1263	N00057	ADDRESS. HEX LOCATION(00002AD2) IN CSECT(I7A28) LENGTH(2) 483 1249
1266	N00058	ADDRESS. HEX LOCATION(00002AD6) IN CSECT(I7A28) LENGTH(2) 486 1192
1269	N00059	ADDRESS. HEX LOCATION(00002ADA) IN CSECT(I7A28) LENGTH(2) 489 850
1281	N00060	ADDRESS. HEX LOCATION(00002AF2) IN CSECT(I7A28) LENGTH(2) 492
1293	N00061	ADDRESS. HEX LOCATION(00002B0A) IN CSECT(I7A28) LENGTH(2) 495
1305	N00062	ADDRESS. HEX LOCATION(00002B1C) IN CSECT(I7A28) LENGTH(2) 498
1308	N00063	ADDRESS. HEX LOCATION(00002B20) IN CSECT(I7A28) LENGTH(2) 501 1294
1320	N00064	ADDRESS. HEX LOCATION(00002B38) IN CSECT(I7A28) LENGTH(2) 504
1323	N00065	ADDRESS. HEX LOCATION(00002B3C) IN CSECT(I7A28) LENGTH(2) 507 1309
1326	N00066	ADDRESS. HEX LOCATION(00002B40) IN CSECT(I7A28) LENGTH(2) 510 1282
1338	N00067	ADDRESS. HEX LOCATION(00002B58) IN CSECT(I7A28) LENGTH(2) 513
1350	N00068	ADDRESS. HEX LOCATION(00002B6A) IN CSECT(I7A28) LENGTH(2) 516
1362	N00069	ADDRESS. HEX LOCATION(00002B82) IN CSECT(I7A28) LENGTH(2) 519
1365	N00070	ADDRESS. HEX LOCATION(00002B86) IN CSECT(I7A28) LENGTH(2) 522 1351
1368	N00071	ADDRESS. HEX LOCATION(00002B8A) IN CSECT(I7A28) LENGTH(2) 525 1339
1380	N00072	ADDRESS. HEX LOCATION(00002B9C) IN CSECT(I7A28) LENGTH(2) 528
1383	N00073	ADDRESS. HEX LOCATION(00002BA0) IN CSECT(I7A28) LENGTH(2) 531 1369
1386	N00074	ADDRESS. HEX LOCATION(00002BA4) IN CSECT(I7A28) LENGTH(2) 534 1327
1389	N00075	ADDRESS. HEX LOCATION(00002BA8) IN CSECT(I7A28) LENGTH(2) 537 1270
1392	N00076	ADDRESS. HEX LOCATION(00002BAC) IN CSECT(I7A28) LENGTH(2) 540 838
1404	N00077	ADDRESS. HEX LOCATION(00002BC6) IN CSECT(I7A28) LENGTH(2) 543
1416	N00078	ADDRESS. HEX LOCATION(00002BDE) IN CSECT(I7A28) LENGTH(2) 546
1428	N00079	ADDRESS. HEX LOCATION(00002BF6) IN CSECT(I7A28) LENGTH(2) 549
1440	N00080	ADDRESS. HEX LOCATION(00002C08) IN CSECT(I7A28) LENGTH(2) 552
1443	N00081	ADDRESS. HEX LOCATION(00002C0C) IN CSECT(I7A28) LENGTH(2) 555 1429

CROSS-REFERENCE LISTING

DECLARED	NAME	ATTRIBUTES AND REFERENCES
1446	N00082	ADDRESS. HEX LOCATION(00002C10) IN CSECT(I7A28) LENGTH(2) 558 1417
1458	N00083	ADDRESS. HEX LOCATION(00002C22) IN CSECT(I7A28) LENGTH(2) 561
1461	N00084	ADDRESS. HEX LOCATION(00002C26) IN CSECT(I7A28) LENGTH(2) 564 1447
1473	N00085	ADDRESS. HEX LOCATION(00002C40) IN CSECT(I7A28) LENGTH(2) 567
1476	N00086	ADDRESS. HEX LOCATION(00002C44) IN CSECT(I7A28) LENGTH(2) 570 1462
1488	N00087	ADDRESS. HEX LOCATION(00002C5C) IN CSECT(I7A28) LENGTH(2) 573
1491	N00088	ADDRESS. HEX LOCATION(00002C60) IN CSECT(I7A28) LENGTH(2) 576 1477
1494	N00089	ADDRESS. HEX LOCATION(00002C64) IN CSECT(I7A28) LENGTH(2) 579 1405
1506	N00090	ADDRESS. HEX LOCATION(00002C7C) IN CSECT(I7A28) LENGTH(2) 582
1509	N00091	ADDRESS. HEX LOCATION(00002C80) IN CSECT(I7A28) LENGTH(2) 585 1495
1521	N00092	ADDRESS. HEX LOCATION(00002C9A) IN CSECT(I7A28) LENGTH(2) 588
1533	N00093	ADDRESS. HEX LOCATION(00002CAC) IN CSECT(I7A28) LENGTH(2) 591
1536	N00094	ADDRESS. HEX LOCATION(00002CB0) IN CSECT(I7A28) LENGTH(2) 594 1522
1548	N00095	ADDRESS. HEX LOCATION(00002CC2) IN CSECT(I7A28) LENGTH(2) 597
1551	N00096	ADDRESS. HEX LOCATION(00002CC6) IN CSECT(I7A28) LENGTH(2) 600 1537
1554	N00097	ADDRESS. HEX LOCATION(00002CCA) IN CSECT(I7A28) LENGTH(2) 603 1510
1566	N00098	ADDRESS. HEX LOCATION(00002CE4) IN CSECT(I7A28) LENGTH(2) 606
1569	N00099	ADDRESS. HEX LOCATION(00002CE8) IN CSECT(I7A28) LENGTH(2) 609 1555
1581	N00100	ADDRESS. HEX LOCATION(00002D00) IN CSECT(I7A28) LENGTH(2) 612
1584	N00101	ADDRESS. HEX LOCATION(00002D04) IN CSECT(I7A28) LENGTH(2) 615 1570
1587	N00102	ADDRESS. HEX LOCATION(00002D08) IN CSECT(I7A28) LENGTH(2) 618 1393
1599	N00103	ADDRESS. HEX LOCATION(00002D20) IN CSECT(I7A28) LENGTH(2) 621
1611	N00104	ADDRESS. HEX LOCATION(00002D3A) IN CSECT(I7A28) LENGTH(2) 624
1623	N00105	ADDRESS. HEX LOCATION(00002D54) IN CSECT(I7A28) LENGTH(2) 627
1635	N00106	ADDRESS. HEX LOCATION(00002D6C) IN CSECT(I7A28) LENGTH(2) 630
1638	N00107	ADDRESS. HEX LOCATION(00002D70) IN CSECT(I7A28) LENGTH(2) 633 1624
1650	N00108	ADDRESS. HEX LOCATION(00002D8A) IN CSECT(I7A28) LENGTH(2) 636
1653	N00109	ADDRESS. HEX LOCATION(00002D8E) IN CSECT(I7A28) LENGTH(2) 639 1639
1656	N00110	ADDRESS. HEX LOCATION(00002D92) IN CSECT(I7A28) LENGTH(2) 642 1612
1668	N00111	ADDRESS. HEX LOCATION(00002DAA) IN CSECT(I7A28) LENGTH(2) 645
1680	N00112	ADDRESS. HEX LOCATION(00002DC4) IN CSECT(I7A28) LENGTH(2) 648
1683	N00113	ADDRESS. HEX LOCATION(00002DC8) IN CSECT(I7A28) LENGTH(2) 651 1669
1686	N00114	ADDRESS. HEX LOCATION(00002DCC) IN CSECT(I7A28) LENGTH(2) 654 1657
1698	N00115	ADDRESS. HEX LOCATION(00002DE6) IN CSECT(I7A28) LENGTH(2) 657
1701	N00116	ADDRESS. HEX LOCATION(00002DEA) IN CSECT(I7A28) LENGTH(2) 660 1687
1704	N00117	ADDRESS. HEX LOCATION(00002DEE) IN CSECT(I7A28) LENGTH(2) 663 1600
1716	N00118	ADDRESS. HEX LOCATION(00002E06) IN CSECT(I7A28) LENGTH(2) 666
1728	N00119	ADDRESS. HEX LOCATION(00002E1E) IN CSECT(I7A28) LENGTH(2) 669
1740	N00120	ADDRESS. HEX LOCATION(00002E36) IN CSECT(I7A28) LENGTH(2) 672
1743	N00121	ADDRESS. HEX LOCATION(00002E3A) IN CSECT(I7A28) LENGTH(2) 675 1729
1746	N00122	ADDRESS. HEX LOCATION(00002E3E) IN CSECT(I7A28) LENGTH(2) 678 1717
1749	N00123	ADDRESS. HEX LOCATION(00002E42) IN CSECT(I7A28) LENGTH(2) 681 1705
1761	N00124	ADDRESS. HEX LOCATION(00002E5C) IN CSECT(I7A28) LENGTH(2) 684
1773	N00125	ADDRESS. HEX LOCATION(00002E74) IN CSECT(I7A28) LENGTH(2) 687
1785	N00126	ADDRESS. HEX LOCATION(00002E8C) IN CSECT(I7A28) LENGTH(2) 690
1797	N00127	ADDRESS. HEX LOCATION(00002EA6) IN CSECT(I7A28) LENGTH(2) 693
1800	N00128	ADDRESS. HEX LOCATION(00002EAA) IN CSECT(I7A28) LENGTH(2) 696 1786
1803	N00129	ADDRESS. HEX LOCATION(00002EAE) IN CSECT(I7A28) LENGTH(2) 699 1774
1806	N00130	ADDRESS. HEX LOCATION(00002EB2) IN CSECT(I7A28) LENGTH(2) 702 1762
1809	N00131	ADDRESS. HEX LOCATION(00002EB6) IN CSECT(I7A28) LENGTH(2) 705 1750
1812	N00132	ADDRESS. HEX LOCATION(00002EBA) IN CSECT(I7A28) LENGTH(2) 708 1588
1824	N00133	ADDRESS. HEX LOCATION(00002ED2) IN CSECT(I7A28) LENGTH(2) 711
1836	N00134	ADDRESS. HEX LOCATION(00002EEC) IN CSECT(I7A28) LENGTH(2) 714
1839	N00135	ADDRESS. HEX LOCATION(00002EF0) IN CSECT(I7A28) LENGTH(2) 717 1825
1842	N00136	ADDRESS. HEX LOCATION(00002EF4) IN CSECT(I7A28) LENGTH(2) 720 1813
1854	N00137	ADDRESS. HEX LOCATION(00002F0C) IN CSECT(I7A28) LENGTH(2)

CROSS-REFERENCE LISTING

DECLARED	NAME	ATTRIBUTES AND REFERENCES
		723
1866	N00138	ADDRESS. HEX LOCATION(00002F26) IN CSECT(I7A28) LENGTH(2) 726
1878	N00139	ADDRESS. HEX LOCATION(00002F40) IN CSECT(I7A28) LENGTH(2) 729
1881	N00140	ADDRESS. HEX LOCATION(00002F44) IN CSECT(I7A28) LENGTH(2) 732 1867
1893	N00141	ADDRESS. HEX LOCATION(00002F5C) IN CSECT(I7A28) LENGTH(2) 735
1905	N00142	ADDRESS. HEX LOCATION(00002F76) IN CSECT(I7A28) LENGTH(2) 738
1908	N00143	ADDRESS. HEX LOCATION(00002F7A) IN CSECT(I7A28) LENGTH(2) 741 1894
1911	N00144	ADDRESS. HEX LOCATION(00002F7E) IN CSECT(I7A28) LENGTH(2) 744 1882
1914	N00145	ADDRESS. HEX LOCATION(00002F82) IN CSECT(I7A28) LENGTH(2) 747 1855
1917	N00146	ADDRESS. HEX LOCATION(00002F86) IN CSECT(I7A28) LENGTH(2) 750 1843
1929	N00147	ADDRESS. HEX LOCATION(00002F9E) IN CSECT(I7A28) LENGTH(2) 753
1932	N00148	ADDRESS. HEX LOCATION(00002FA2) IN CSECT(I7A28) LENGTH(2) 756 1918
1935	N00149	ADDRESS. HEX LOCATION(00002FA6) IN CSECT(I7A28) LENGTH(2) 759 826
1947	N00150	ADDRESS. HEX LOCATION(00002FB8) IN CSECT(I7A28) LENGTH(2) 762
1959	N00151	ADDRESS. HEX LOCATION(00002FD2) IN CSECT(I7A28) LENGTH(2) 765
1971	N00152	ADDRESS. HEX LOCATION(00002FEC) IN CSECT(I7A28) LENGTH(2) 768
1974	N00153	ADDRESS. HEX LOCATION(00002FF0) IN CSECT(I7A28) LENGTH(2) 771 1960
1977	N00154	ADDRESS. HEX LOCATION(00002FF4) IN CSECT(I7A28) LENGTH(2) 774 1948
1989	N00155	ADDRESS. HEX LOCATION(00003006) IN CSECT(I7A28) LENGTH(2) 777
1992	N00156	ADDRESS. HEX LOCATION(0000300A) IN CSECT(I7A28) LENGTH(2) 780 1978
1995	N00157	ADDRESS. HEX LOCATION(0000300E) IN CSECT(I7A28) LENGTH(2) 783 1936
2007	N00158	ADDRESS. HEX LOCATION(00003026) IN CSECT(I7A28) LENGTH(2) 786
2019	N00159	ADDRESS. HEX LOCATION(00003040) IN CSECT(I7A28) LENGTH(2) 789
2022	N00160	ADDRESS. HEX LOCATION(00003044) IN CSECT(I7A28) LENGTH(2) 792 2008
2025	N00161	ADDRESS. HEX LOCATION(00003048) IN CSECT(I7A28) LENGTH(2) 795 1996
2037	N00162	ADDRESS. HEX LOCATION(00003060) IN CSECT(I7A28) LENGTH(2) 798
2049	N00163	ADDRESS. HEX LOCATION(00003072) IN CSECT(I7A28) LENGTH(2) 801
2052	N00164	ADDRESS. HEX LOCATION(00003076) IN CSECT(I7A28) LENGTH(2) 804 2038
2064	N00165	ADDRESS. HEX LOCATION(00003090) IN CSECT(I7A28) LENGTH(2) 807
2067	N00166	ADDRESS. HEX LOCATION(00003094) IN CSECT(I7A28) LENGTH(2) 810 2053
2070	N00167	ADDRESS. HEX LOCATION(00003098) IN CSECT(I7A28) LENGTH(2) 813 2026
58	OF	ABSOLUTE. HEX VALUE(00000202) 852 864 876 888 900 912 954 966 978 1032 1071 1083 1107 1176 1194 1233 1251 1284 1296 1311 1329 1341 1353 1371 1395 1407 1419 1431 1449 1464 1512 1524 1539 1557 1572 1590 1602 1614 1626 1641 1659 1671 1707 1752 1788 1827 1845 1857 1869 1896 1920 1938 1950 1962 1980 2010 2028 2040 2055
57	ON	ABSOLUTE. HEX VALUE(00000200) 828 840 924 939 990 1017 1053 1095 1122 1140 1152 1206 1221 1272 1479 1497 1689 1719 1731 1764 1776 1815 1884 1998
2160	OPTN1	ADDRESS. HEX LOCATION(000031F8) IN CSECT(I7A28) LENGTH(2) 3412 3452 3690
2183	OPTN3	ADDRESS. HEX LOCATION(000031FC) IN CSECT(I7A28) LENGTH(2) 3501 3549
101	PARMARA	ADDRESS. HEX LOCATION(0000196E) IN CSECT(I7A28) LENGTH(1) 835 847 859 871 883 895 907 919 931 946 961 973 985 997 1024 1039 1060 1078 1090 1102 1114 1129 1147 1159 1183 1201 1213 1228 1240 1258 1279 1291 1303 1318 1336 1348 1360 1378 1402 1414 1426 1438 1456 1471 1486 1504 1519 1531 1546 1564 1579 1597 1609 1621 1633 1648 1666 1678 1696 1714 1726 1738 1759 1771 1783 1795 1822 1834 1852 1864 1876 1891 1903 1927 1945 1957 1969 1987 2005 2017 2035 2047 2062
69	PID	ADDRESS. HEX LOCATION(00001800) IN CSECT(I7A28) LENGTH(1) 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 3607
3643	PIDMSG10	ABSOLUTE. HEX VALUE(0000F1F0) 3607
2282	PREP	ABSOLUTE. HEX VALUE(0000000C) 3559
2458	RDDCB	ADDRESS. HEX LOCATION(000032D0) IN CSECT(I7A28) LENGTH(2) 2612 2613 2615 2670 2671 2672
2289	RICB	ABSOLUTE. HEX VALUE(00000013) 3616
2480	RKDCB	ADDRESS. HEX LOCATION(000032F0) IN CSECT(I7A28) LENGTH(2) 2624 2629
2491	RMDCB	ADDRESS. HEX LOCATION(00003300) IN CSECT(I7A28) LENGTH(2) 2604
2514	RSBA	ADDRESS. HEX LOCATION(0000332A) IN CSECT(I7A28) LENGTH(2) 2380 2396 2407 2418 2440 2451 2462 2473 2484 2495
2403	RSDCB	ADDRESS. HEX LOCATION(00003280) IN CSECT(I7A28) LENGTH(2) 2596 2601

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CROSS-REFERENCE LISTING

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DECLARED	NAME	ATTRIBUTES AND REFERENCES
0	R0	REGISTER. HEX VALUE(00000000)
		2657 2659 2660
0	R1	REGISTER. HEX VALUE(00000001)
		3596 3599 3602 3605
0	R2	REGISTER. HEX VALUE(00000002)
		3601 3602
0	R3	REGISTER. HEX VALUE(00000003)
		2543 2545 2597 2600 2607 2608 2611 2614 2625
		2628 2644 2647 2650 2652 2673 2674 3295 3308
		3311 3312 3315 3317 3374 3375 3376 3410 3411
		3417 3421 3450 3451 3456 3469 3501 3546 3548
		3549 3557 3594 3595 3599 3611
0	R4	REGISTER. HEX VALUE(00000004)
		2653 2654 2655 3301 3302 3305 3319 3320 3322
		3323 3326 3332 3340 3412 3413 3415 3419 3423
		3452 3453 3454 3464 3465 3466 3468 3471 3481
		3483 3485 3488 3490 3690
0	R5	REGISTER. HEX VALUE(00000005)
		2544 2545 2598 2600 2606 2608 2612 2614 2626
		2628 2645 2647 2648 2650 2672 2674 3309 3311
		3313 3315 3331 3338 3460 3461 3462 3493 3494
		3496 3498 3547 3548 3593 3606
0	R6	REGISTER. HEX VALUE(00000006)
		2546 2547 2643 3307 3327 3341 3377 3482 3487
		3489 3497 3500 3502 3552 3558 3560 3598 3603
		3604 3691
0	R7	REGISTER. HEX VALUE(00000007)
		2262 2542 2599 2605 2613 2627 2646 2649 2656
		2671 3310 3314 3321 3416 3457 3545 3550 3555
		3588 3597 3600 3612 3615 3688
2223	SCTID	ADDRESS. HEX LOCATION(00003206) IN CSECT(I7A28) LENGTH(2)
		2410 2487 2543 2598 2601 2626 2629
2414	SKDCB	ADDRESS. HEX LOCATION(00003290) IN CSECT(I7A28) LENGTH(2)
		2590
2280	START	ABSOLUTE. HEX VALUE(0000000A)
		3324
104	SUPSTAT	ADDRESS. HEX LOCATION(000019C4) IN CSECT(I7A28) LENGTH(1)
		3610
92	TUMSGWTR	ADDRESS. HEX LOCATION(000018BA) IN CSECT(I7A28) LENGTH(1)
		3612
98	TURESUL	ADDRESS. HEX LOCATION(000018C8) IN CSECT(I7A28) LENGTH(1)
		3694 3695
2252	TURTN	ADDRESS. HEX LOCATION(00003240) IN CSECT(I7A28) LENGTH(2)
		3617 3688
74	TUSTATUS	ADDRESS. HEX LOCATION(00001818) IN CSECT(I7A28) LENGTH(1)
		3587
75	TUWORK	ADDRESS. HEX LOCATION(0000181A) IN CSECT(I7A28) LENGTH(1)
		3590 3591 3592 3594 3650 3694 3695
2261	T7A02	ADDRESS. HEX LOCATION(00003248) IN CSECT(I7A28) LENGTH(6)
		839 851 863 875 887 899 911 923 938
		953 965 977 989 1016 1031 1052 1070 1082
		1094 1106 1121 1139 1151 1175 1193 1205 1220
		1232 1250 1271 1283 1295 1310 1328 1340 1352
		1370 1394 1406 1418 1430 1448 1463 1478 1496
		1511 1523 1538 1556 1571 1589 1601 1613 1625
		1640 1658 1670 1688 1706 1718 1730 1751 1763
		1775 1787 1814 1826 1844 1856 1868 1883 1895
		1919 1937 1949 1961 1979 1997 2009 2027 2039
		2054
3688	T7A10	ADDRESS. HEX LOCATION(0000378C) IN CSECT(I7A28) LENGTH(4)
		827
2447	VRDCB	ADDRESS. HEX LOCATION(000032C0) IN CSECT(I7A28) LENGTH(2)
		2618
2469	WKDCB	ADDRESS. HEX LOCATION(000032E0) IN CSECT(I7A28) LENGTH(2)
		2632 2633
2436	WRDCB	ADDRESS. HEX LOCATION(000032B0) IN CSECT(I7A28) LENGTH(2)
		2621 2667
2286	WRIT0	ABSOLUTE. HEX VALUE(00000010)
		2662
2287	WRIT1	ABSOLUTE. HEX VALUE(00000011)
		2664
2508	WRSID	ADDRESS. HEX LOCATION(0000331E) IN CSECT(I7A28) LENGTH(2)
		2399 2476 2544 2633 2637
2392	WSDCB	ADDRESS. HEX LOCATION(00003270) IN CSECT(I7A28) LENGTH(2)
		2636 2637
2199	XE	ABSOLUTE. HEX VALUE(00000024)
		3419 3481
2197	XI	ABSOLUTE. HEX VALUE(00000022)
		2655 3323 3466
3295	XIO	ADDRESS. HEX LOCATION(00003460) IN CSECT(I7A28) LENGTH(4)
		2591 2594 2602 2609 2616 2619 2622 2630 2634
		2638 2641
3481	XIOCK	ADDRESS. HEX LOCATION(00003534) IN CSECT(I7A28) LENGTH(2)
		3333
3488	XIOCO	ADDRESS. HEX LOCATION(00003546) IN CSECT(I7A28) LENGTH(2)
		3486
3498	XIOCQ	ADDRESS. HEX LOCATION(0000355C) IN CSECT(I7A28) LENGTH(4)
		3495
3303	XIOCS	ADDRESS. HEX LOCATION(00003472) IN CSECT(I7A28) LENGTH(6)
		3499
3490	XIOCV	ADDRESS. HEX LOCATION(0000354A) IN CSECT(I7A28) LENGTH(2)
		3484
3501	XIOCX	ADDRESS. HEX LOCATION(00003568) IN CSECT(I7A28) LENGTH(4)
		3491
3298	XIODG	ADDRESS. HEX LOCATION(00003466) IN CSECT(I7A28) LENGTH(6)
		2668 2675
3374	XIOER	ADDRESS. HEX LOCATION(000034D2) IN CSECT(I7A28) LENGTH(2)
		3507
3307	XIO1	ADDRESS. HEX LOCATION(00003482) IN CSECT(I7A28) LENGTH(4)
		3296 3299
3320	XIO2	ADDRESS. HEX LOCATION(000034A8) IN CSECT(I7A28) LENGTH(2)
		3306
3332	XIO8	ADDRESS. HEX LOCATION(000034BE) IN CSECT(I7A28) LENGTH(2)
		2663 2665 3339