```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117IO&                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                 3

                          1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 2 -VERSION 3       3722L              PAGE    1

 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101         001    JOB   1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 2 -VERSION 3
 102                CTL   630 1
 103                SFX   I                                                 I
 104         OTHER  EQU   START                                             I      0101
 105         MINUS2 EQU   2                                                 I      0002
 106         MINUS3 EQU   3                                                 I      0003
 107         DIOCSB EQU   LABDIO-4                                          I      0576
 108                ORG   1                                                 I            0001
 109         MAINX  DA    1X86                                              I      0001  0086                   ADDR
 110         LMAINX EQU   *                                                 I      0086
 111         *      XINIT INDEX1,INDEX2,INDEX3
 112         INDEX1 EQU   089                                               I      0089
 113         089    DCW   000                                               I   3  0089                      4
 114         091    DC    00                                                I   2  0091                      4
 115         INDEX2 EQU   094                                               I      0094
 116         094    DCW   000                                               I   3  0094                      4
 117         096    DC    00                                                I   2  0096                      4
 118         INDEX3 EQU   099                                               I      0099
 119         099    DCW   000                                               I   3  0099                      4
 120         100    DC    0                                                 I   1  0100                      4
 121         *
 122         * START OF MAIN LINE
 123         *
 124                ORG   101                                               I            0101
 125         START  RWD   4                                                 I   5  0101  U %U4 R              4
 126                RWD   5                                                 I   5  0106  U %U5 R              4
 127                RWD   6                                                 I   5  0111  U %U6 R              4
 128                BSS   OVLAY2,B                                          I   5  0116  B P32 B              5
 129                B     REDREC                                            I   4  0121  B 774                5
 130                C     MAINX&17, @JOB@                                   I   7  0125  C 018 W05            5
 131                BU    CMCTL                                             I   5  0132  B 157 /              5
 132                CC    1                                                 I   2  0137  F 1                  5
 133                MCW   80,280                                            I   7  0139  M 080 280            5
 134                W                                                       I   1  0146  2                    5
 135                CC    1                                                 I   2  0147  F 1                  6
 136                B     WRTREC                                            I   4  0149  B 721                6
 137                B     REDREC                                            I   4  0153  B 774                6
 138         CMCTL  C     MAINX&17, @CTL@                                   I   7  0157  C 018 W08            6
 139                BU    FIND                                              I   5  0164  B 642 /              6
 140                BCE   ROBIN,MAINX&23,1                                  I   8  0169  B 623 024 1          6
 141                MN    MAINX&21,*&8                                      I   7  0177  D 022 191            6
 142                BCE   ROBIN,@456@,                                      I   8  0184  B 623 W11            7
 143                CHAIN 2                                                 I                        MACRO
 144                BCE                                                     I   1  0192  B           GEN      7
 145                BCE                                                     I   1  0193  B           GEN      7
 146                B     BLUE                                              I   4  0194  B 627              7
 147                ORG   201                                               I            0201
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                          1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 2 -VERSION 3       3722L              PAGE    2

 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148                DA    1X132                                             I      0201   0332
 149                      6,6                                             I      0206              FIELD
 150         DTFTAB EQU   LABDTF-1                                         I      0349
 151                ORG   333                                             I            0333
 152         EITHER B     NEXREC                                            I   4  0333  B 681               8
 153         *
 154         *              CONTROL CARD INFORMATION
 155         *
 156         SPECL  DCW   @*@                                               I   1  0337                      8
 157         SYMNM  DCW   #3                                                I   3  0340                      8
 158         *
 159         *              DTF  MAJOR  TABLE
 160         *
 161                DCW   @,@                                               I   1  0341                      8
 162                DCW   @ @               COBOL   YES                     I   1  0342                      8
 163                DCW   @ @               EXITS   YES                     I   1  0343                      8
 164         FILENM DCW   #6                                                I   6  0349                      8
 165         LABDTF DCW   @ @          1     INPUT        1     FILETYPE     I   1  0350                      9
 166                DCW   @ @          2     OUTPUT       2                  I   1  0351                      9
 167                DCW   @ @          3     TAPE         3                  I   1  0352                      9
 168                DCW   @ @          4     READER       4                  I   1  0353                      9
 169                DCW   @ @          5     PUNCH        5                  I   1  0354                      9
 170                DCW   @ @          6     PRINTER      6                  I   1  0355                      9
 171                DCW   @ @          7     LOAD         7     MODEPAR      I   1  0356                      9
 172                DCW   @ @          8     CHECKPOINT    8    FEATURES     I   1  0357                     10
 173                DCW   @ @          9     NUMBER       9     CHANDRIVE    I   1  0358                     10
 174                DCW   @ @         10     NUMBER      10     CARDPOC      I   1  0359                     10
 175                DCW   @ @         11     NUMBER      11     ALTTAPE      I   1  0360                     10
 176                DCW   @ @         12     BLOCKED     12     RECFORM      I   1  0361                     10
 177                DCW   @ @         13     UNBLOCKED   13                  I   1  0362                     10
 178                DCW   @ @         14     MIXED       14                  I   1  0363                     10
 179                DCW   @ @         15     VARIABLE    15                  I   1  0364                     11
 180                DCW   @    @      16-19  NUMBER      16     SIZEREC      I   4  0368                     11
 181                DCW   @ @         20     NUMBER      17     PADDING      I   1  0369                     11
 182                DCW   @    @      21-24  NUMBER      18     BLOCKSIZE    I   4  0373                     11
 183                DCW   @         @   25-34    LABELS  19     IOAREAS      I  10  0383                     11
 184                DCW   @         @   35-44            20                  I  10  0393                     11
 185                DCW   @         @  45-54             21     WORKAREA     I  10  0403                     12
 186                DCW   @ @         55    NUMBER      22     INDEXREG     I   1  0404                     12
 187                DCW   @         @  56-65 LABEL      23     EORADDR      I  10  0414                     12
 188                DCW   @         @   66-75 LABEL     24     WLRADDR      I  10  0424                     12
 189                DCW   @ @           76    RECORD      25     TOTALS       I   1  0425                     12
 190                DCW   @    @        77-80 HASH        26                  I   4  0429                     12
 191                DCW   @ @           81    STANDARD    27                  I   1  0430                     12
 192                DCW   @ @           82    NONSTANDARD 28                  I   1  0431                     13
 193                DCW   @ @           83    TM          29                  I   1  0432                     13
 194                DCW   @ @           84    ALL         30                  I   1  0433                     13
 195                DCW   @ @           85    IDENT       31                  I   1  0434                     13
 196                DCW   @   @                                             I   3  0437                     13
 197                DCW   @     @                                           I   5  0442                     13
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
198                 DCW   @         @                                        I  10  0452                    13
199                 DCW   @     @     104-108 NUMBER     35     SERIALNUM    I   5  0457                    14
200                 DCW   @         @ 109-118            39     EX1ADDR      I  10  0467                    14
201                 DCW   @         @ 119-128            40     EX2ADDR      I  10  0477                    14
202                 DCW   @         @ 129-138            41     EX3ADDR      I  10  0487                    14
203                 DCW   @         @ 139-148            42     EX4ADDR      I  10  0497                    15
204                 DCW   @         @ 149-158            43     EX5ADDR      I  10  0507                    15
205                 DCW   @         @ 159-168            44     EX6ADDR      I  10  0517                    15
206                 DCW   @         @ 169-178            45     EX7ADDR      I  10  0527                    16
207                 DCW   @         @ 179-188            46     EX8ADDR      I  10  0537                    16
208                 DCW   @         @ 189-198            47     VARBUILD     I  10  0547                    16
209                 DCW   @ @         199  UNLOAD       37                  I   1  0548                    16
210                 DCW   @ @         100  NOREWD       38                  I   1  0549                    16
211                 DCW   @ @          9      201              OVERFLOW     I   1  0550                    16
212                 DCW   @ @         12      202                           I   1  0551                    16
213                 DCW   @   @      203-205   NUMBER          REELSEQP     I   3  0554                    17
214                 DCW   @ @            206                   FORMCNTL     I   1  0555                    17
215                 DCW   #9                                                 I   9  0564                    17
216                 DCW   @ @          216     ADDRESS         OVERFLOW     I   1  0565                    17
217                 DCW   @ @                                                I   1  0566                    17
218         ENDDTF  DCW   @ @                                                I   1  0567                    17
219         *
220         *             DIOCS MAJOR TABLE
221         *
222                 DCW   @,@                                                I   1  0568                    17
223         DIVIDE  EQU   *                                                  I      0568
224                 DCW   @ @              40   PAR        OUT  TAPEUSE      I   1  0569                    18
225                 DCW   @ @              39   PAR        INP  TAPEUSE      I   1  0570                    18
226                 DCW   @ @              38   PAR        YES  EXITS        I   1  0571                    18
227         LABDIO  DCW   #9                        DIOCSORG                 I   9  0580                    18
228                 DCW   @ @               5                               I   1  0581                    18
229                 DCW   @ @               6       OVERLAP    FEATURES      I   1  0582                    18
230                 DCW   @ @               7       TAPE       IODEVICES     I   1  0583                    18
231                 DCW   @ @               8       READER                   I   1  0584                    19
232                 DCW   @ @               9       PUNCH                    I   1  0585                    19
233                 DCW   @ @              10       PRINTER                  I   1  0586                    19
234                 DCW   @ @              11       STANDARD   LABELDEF      I   1  0587                    19
235                 DCW   @ @              12       NONSTANDARD              I   1  0588                    19
236                 DCW   @ @              13       MIXED                    I   1  0589                    19
237                 DCW   @ @              14       CHECK                    I   1  0590                    19
238                 DCW   @ @              15       IDENT                    I   1  0591                    20
239                 DCW   @ @              16       TM                       I   1  0592                    20
240                 DCW   @ @              17       YES        ALTDRIVE      I   1  0593                    20
241                 DCW   @ @              18       1          EXITS         I   1  0594                    20
242                 DCW   @ @              19       2                        I   1  0595                    20
243                 DCW   @ @              20       3                        I   1  0596                    20
244                 DCW   @ @              21       4                        I   1  0597                    20
245                 DCW   @ @              22       5                        I   1  0598                    21
246                 DCW   @ @              23       6                        I   1  0599                    21
247                 DCW   @ @              24       7                        I   1  0600                    21
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
248                 DCW   @ @              25       8                        I   1  0601                    21
249                 DCW   @ @              RDLIN    LABELDEF                 I   1  0602                    21
250                 DCW   @ @              27       729        DRIVETYPE     I   1  0603                    21
251                 DCW   @ @              28       7330                     I   1  0604                    21
252                 DCW   @ @              29       NORWD      RWDOPTION     I   1  0605                    22
253                 DCW   @ @              30       UNLOAD                   I   1  0606                    22
254                 DCW   @ @              31    TAPE,#        READERROR     I   1  0607                    22
255                 DCW   @ @              32    SCAN                       I   1  0608                    22
256                 DCW   @ @              33    PROCESS                    I   1  0609                    22
257                 DCW   @ @              CLEAN    READERROR               I   1  0610                    22
258                 DCW   @ @              35       YES        INPVAR        I   1  0611                    22
259                 DCW   @ @              36       YES        INPFXNO       I   1  0612                    23
260                 DCW   @ @              37       RECORD     COUNTS        I   1  0613                    23
261                 DCW   @ @         38   HASH                            I   1  0614                    23
262                 DCW   #5                                                 I   5  0619                    23
263                 DCW   @ @         39-44       CHECKPOINT                I   1  0620                    23
264                 DCW   @ @          45  RELEASE             FEATURES     I   1  0621                    23
265         ENDDIO  DCW   @ @          46  STORAGE                          I   1  0622                    23
266         *
267         *
268         ROBIN   S     SPECL                                              I   4  0623  S 337              24
269         BLUE    MCW   MAINX&25,NORDRL#1                                  I   7  0627  M 026 W12          24
270         THRU    B     WRTREC                                             I   4  0634  B 721              24
271                 B     REDREC                                             I   4  0638  B 774              24
272         FIND    C     MAINX&19,KDIOCS                                    I   7  0642  C 020 V71          24
273                 BE    GOTIT                                              I   5  0649  B 670 S            24
274         *
275         *
276         *                READ IN PHASE 2
277         *
278         *
279                 BCE   THRU,MAINX&5,*                                     I   8  0654  B 634 006 *         24
280         PREPS2  B     SAVCD                                              I   4  0662  B O98              25
281                 B     PASS2                                              I   4  0666  B V06              25
282         GOTIT   MCW   @M@,LENGTH                                         I   7  0670  M W13 743          25
283         WHOM    B     WRTREC                                             I   4  0677  B 721              25
284         NEXREC  B     REDREC                                             I   4  0681  B 774              25
285         GAMMA   BCE   WHOM,MAINX&5,*                                     I   8  0685  B 677 006 *         25
286                 C     MAINX&17,@DTF@                                     I   7  0693  C 018 W16          25
287                 BE    DTFND                                              I   5  0700  B 713 S            26
288                 B     WRTREC                                             I   4  0705  B 721              26
289                 B     UPPER                                              I   4  0709  B 821              26
290         DTFND   B     SAVCD                                              I   4  0713  B O98              26
291                 B     CRDOUT                                             I   4  0717  B J68              26
292         *
293         *               WRITE ROUTINE
294         *
295         WRTREC  SBR   WRTEXT&3                                           I   4  0721  H 761              26
296                 MCW   LMAINX,LOPUT-1                                     I   7  0725  M 086 I97          26
297                 SW    LOPUT                                              I   4  0732  , I98              27
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298                 MCW   GMWMRK,LOPUT                              I   7  0736  M 773 I98          27
299         LENGTH  NOP   @W@,OUTPT&74                              I   7  0743  N W17 I86          27
300         SHORT   B     CTAPE                                     I   4  0750  B S22              27
301                 NOP   TDF6                                      I   4  0754  N 764              27
302         WRTEXT  B     0                                         I   4  0758  B 000              27
303         TDF6    DCW   000                                       I   3  0764                     27
304                 WT    6,OUTPT                                   I   8  0765  M %U6 I12 W        28
305         GMWMRK  DC    @}@                                       I   1  0773             GMARK   28
306         *
307         *               READ ROUTINE
308         *
309         REDREC  SBR   REDEXT&3                                  I   4  0774  H 809              28
310                 CS    LMAINX                                    I   4  0778  / 086              28
311                 BSS   RTWED,C                                   I   5  0782  B 798 C            28
312                 BLC   DTFOUT                                    I   5  0787  B M46 A            28
313                 R                                               I   1  0792  1                  28
314                 SSB   REDEXT,1                                  I   5  0793  K 806 1            28
315         RTWED   B     CTAPE                                     I   4  0798  B S22              29
316                 NOP   TDF4                                      I   4  0802  N 812              29
317         REDEXT  B     0                                         I   4  0806  B 000              29
318         TDF4    DCW   &DTFOUT                                   I   3  0812  M46                29
319                 RT    4,MAINX                                   I   8  0813  M %U4 001 R        29
320         *
321         *               LOOK UP LABEL
322         *
323         UPPER   CW    SCNSW#1                                   I   4  0821  ) W18              29
324                 BCE   NEXREC,MAINX&20,                          I   8  0825  B 681 021          29
325                 SBR   CHAIR&3,LSTPAR                            I   7  0833  H O66 O75          30
326                 S     INDEX2&1                                  I   4  0840  S 095              30
327                 SBR   INDEX3,LBLTBL                             I   7  0844  H 099 H46          30
328         COMPR   C     MAINX&7,0&X3                              I   7  0851  C 008 0?0          30
329                 SBR   INDEX3                                    I   4  0858  H 099              30
330                 BE    COMEQ                                     I   5  0862  B 984 S            30
331                 BCE   NEXREC,0&X3,@                            I   8  0867  B 681 0?0 @        31
332                 A     @7@,INDEX2                                I   7  0875  A W19 094          31
333                 B     COMPR                                     I   4  0882  B 851              31
334         BRTBL   B     ACTSCN                                    I   4  0886  B /13              31
335                 DCW   &DIOCSB&36                INPFXNO         I   3  0892  612                31
336                 B     REASB                                     I   4  0893  B /73              31
337                 DCW   #3                        READERROR       I   3  0899                     31
338                 B     OPDSCN                                    I   4  0900  B O14              32
339                 DCW   &RWDTB                    RWDOPT          I   3  0906  F95                32
340                 B     OPDSCN                                    I   4  0907  B O14              32
341                 DCW   &DRITB                    DRIVETYPE       I   3  0913  F82                32
342                 B     OPDSCN                                    I   4  0914  B O14              32
343                 DCW   &COUTB                    COUNTS          I   3  0920  G08                32
344                 B     ACTSCN                                    I   4  0921  B /13              32
345                 DCW   &DIOCSB&35                VARINP          I   3  0927  611                33
346                 B     EXISB                                     I   4  0928  B 992              33
347                 DCW   #3                                        I   3  0934                     33
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348                 B     ACTSCN                                    I   4  0935  B /13              33
349                 DCW   &DIOCSB&17                ALTDRIVE        I   3  0941  593                33
350                 B     OPDSCN                                    I   4  0942  B O14              33
351                 DCW   &LABTB                    LABELDEF        I   3  0948  F20                33
352                 B     OPDSCN                                    I   4  0949  B O14              34
353                 DCW   &IODTB                    IODEVICES       I   3  0955  E77                34
354                 B     OPDSCN                                    I   4  0956  B O14              34
355                 DCW   &FEATB                    FEATURES        I   3  0962  E52                34
356                 B     DIOSB                     DIOCSORG        I   4  0963  B /47              34
357                 DCW   &DIOCSB&5                                 I   3  0969  581                34
358                 B     DIOSB                                     I   4  0970  B /47              34
359                 DCW   &DIOCSB&44                                I   3  0976  620                35
360                 B     OPDSCN                                    I   4  0977  B O14              35
361                 DCW   &TAPTB                                    I   3  0983  E33                35
362         COMEQ   S     INDEX3&1                                  I   4  0984  S 100              35
363                 B     BRTBL&X2                                  I   4  0988  B 8Q6              35
364         *
365         EXISB   LCA   @$@,DIVIDE&3                              I   7  0992  L W20 571          35
366                 B     OPDSCN                                    I   4  0999  B O14              35
367                 DCW   &EXITB                    EXITS           I   3  1005  F69                36
368         *
369         NEWSCN  SBR   NWEXT&3                                   I   4  1006  H /04              36
370                 MCW   @   @,OPDAR#3                             I   7  1010  M W23 W26          36
371                 S     INDEX2&1                                  I   4  1017  S 095              36
372         NWSCNL  C     MAINX&21&X3,@  @                          I   7  1021  C 0B2 W28          36
373                 SW    MAINX&20                                  I   4  1028  , 021              36
374                 BE    FDBLK                                     I   5  1032  B '90 S            36
375                 BCE   FOUND,MAINX&20&X3,,                       I   8  1037  B /05 0B1 ,        37
376                 C     INDEX3,@52@                               I   7  1045  C 099 W30          37
377                 BE    BLKFD                                     I   5  1052  B '97 S            37
378                 MCW   MAINX&20&X3,OPDAR-2&X2                    I   7  1057  M 0B1 WK4          37
379                 A     @1@,INDEX2                                I   7  1064  A W31 094          37
380                 BCE   FOUND,INDEX2,3                           I   8  1071  B /05 094 3        38
381                 A     @1@,INDEX3                                I   7  1079  A W31 099          38
382                 B     NWSCNL                                    I   4  1086  B '21              38
383         FDBLK   A     @1@,INDEX3                                I   7  1090  A W31 099          38
384         BLKFD   SW    SCNSW                                     I   4  1097  , W18              38
385         NWEXT   B     0                                         I   4  1101  B 000              38
386         FOUND   B     SCANX                                     I   4  1105  B N55              38
387                 B     NWEXT                                     I   4  1109  B /01              39
388         *
389         *               ACTUAL  SCAN  FOR YES
390         *
391         ACTSCN  SBR   INDEX1                                    I   4  1113  H 089              39
392                 MCW   2&X1,INDEX1                               I   7  1117  M 0'2 089          39
393                 C     MAINX&22,@YES@                            I   7  1124  C 023 W34          39
394                 BU    ACTOUT                                    I   5  1131  B /43 /            39
395                 LCA   @$@,0&X1                                  I   7  1136  L W20 0'0          39
396         ACTOUT  B     EITHER                                    I   4  1143  B 333              39
397         *
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

398         *             DIOCSORG
399         *
400         DIOSB   SBR   INDEX1                                    I   4  1147  H 089             40
401                 MCW   2&X1,INDEX1                               I   7  1151  M 0'2 089         40
402                 B     SCANX                                     I   4  1158  B N55             40
403                 LCA   MAINX&18&X3,0&X1                          I   7  1162  L 0A9 0'0         40
404                 B     NEXREC                                    I   4  1169  B 681            40
405         *
406         *             READERROR
407         *
408         REASB   SBR   CHAIR&3,CHTAP                             I   7  1173  H O66 /87         40
409                 B     OPDSCN                                    I   4  1180  B O14             40
410                 DCW   &REATB                                    I   3  1186  G27               41
411         CHTAP   C     OPDAR,@TAP@                               I   7  1187  C W26 W37         41
412                 BU    LSTPAR                                    I   5  1194  B O75 /           41
413                 B     SCANX                                     I   4  1199  B N55             41
414                 BCE   LSTPAR,MAINX&18&X3,                       I   8  1203  B O75 0A9         41
415                 MCW   MAINX&18&X3,DIOCSB&31                     I   7  1211  M 0A9 607         41
416                 B     LSTPAR                                    I   4  1218  B O75            41
417         *
418         *             COMBINATION READ/ WRITE ROUTINE
419         *
420         CTAPE   SBR   INDEX2                                    I   4  1222  H 094             42
421                 SBR   ICONPR&3                                  I   4  1226  H T43             42
422                 MCW   3&X2,INDEX2                               I   7  1230  M 0!3 094         42
423                 MCW   8&X2,ITAPEC&7                             I   7  1237  M 0!8 T01         42
424                 MCW   0&X2,IEORC&3                              I   7  1244  M 0!0 T13         42
425                 SW    ICOMPR&4                                  I   4  1251  , T19            42
426                 MCW   7&X2,ICOMPR&6                             I   7  1255  M 0!7 T21         43
427                 A     @12@,ICOMPR&6                             I   7  1262  A W39 T21         43
428                 CW    ICOMPR&4                                  I   4  1269  ) T19            43
429                 MN    ITAPEC&3,IHALT&6                          I   7  1273  D S97 U28         43
430                 MN    ITAPEC&7,IHALT&6                          I   7  1280  D T01 U28         43
431                 MCW   @9@,IERRCT#1                             I   7  1287  M W40 W41         43
432         ITAPEC  RT    0,0                                       I   8  1294  M %U0 000 R       44
433                 BCE   IOMETS,ITAPEC&7,W                         I   8  1302  B T35 T01 W       44
434         IEORC   BEF   0                                         I   5  1310  B 000 K           44
435         ICOMPR  BCE   ITAPEC,0,}                                I   8  1315  B S94 000 } GMARK  44
436                 CHAIN 12                                        I                MACRO
437                 BCE                                             I   1  1323  B           GEN   44
438                 BCE                                             I   1  1324  B           GEN   44
439                 BCE                                             I   1  1325  B           GEN   44
440                 BCE                                             I   1  1326  B           GEN   45
441                 BCE                                             I   1  1327  B           GEN   45
442                 BCE                                             I   1  1328  B           GEN   45
443                 BCE                                             I   1  1329  B           GEN   45
444                 BCE                                             I   1  1330  B           GEN   45
445                 BCE                                             I   1  1331  B           GEN   45
446                 BCE                                             I   1  1332  B           GEN   45
447                 BCE                                             I   1  1333  B           GEN   46
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

448                 BCE                                             I   1  1334  B           GEN   46
449         IOMETS  BER   IRWRED                                    I   5  1335  B T44 L          46
450         ICONPR  B     0                                         I   4  1340  B 000            46
451         IRWRED  S     @1@,IERRCT                                I   7  1344  S W31 W41         46
452                 MN    ITAPEC&3,*&4                              I   7  1351  D S97 T61         46
453                 BSP   0                                         I   5  1358  U %U0 B           46
454                 BCE   ITROW,ITAPEC&7,W                          I   8  1363  B T83 T01 W       47
455                 BM    IHALT,IERRCT                              I   8  1371  V U22 W41 K       47
456                 B     ITAPEC                                    I   4  1379  B S94            47
457         ITROW   A     @1@,IERASC#2                              I   7  1383  A W31 W43         47
458                 SKP   6                                         I   5  1390  U %U6 E          47
459                 BCE   ICHALT,IERASC-1,5                         I   8  1395  B U07 W42 5      48
460                 B     ITAPEC-7                                  I   4  1403  B S87            48
461         ICHALT  S     IERASC                                    I   4  1407  S W43            48
462                 H     0,202                                     I   7  1411  . 000 202        48
463                 B     ITAPEC-7                                  I   4  1418  B S87            48
464         IHALT   H     0,200                                     I   7  1422  . 000 200        48
465                 BSS   ITAPEC-7,E                                I   5  1429  B S87 E          48
466                 MCW   ITAPEC&7,*&8                              I   7  1434  M T01 U48        49
467                 RT    0,0                                       I   8  1441  M %U0 000 R      49
468                 H     0,201                                     I   7  1449  . 000 201        49
469                 B     ICONPR                                    I   4  1456  B T40            49
470         PASSI   LCA   ENDDIO,ENDDTF                             I   7  1460  L 622 567        49
471                 LCA                                             I   1  1467  L                49
472                 SBR   EITHER&3,DIFREC                           I   7  1468  H 336 M06        50
473                 MCW   &DTFTAB&X1,OPDFND&6                       I   7  1475  M W46 O93        50
474                 LCA   186,LMAINX                                I   7  1482  L 186 086        50
475                 B     WRTREC                                    I   4  1489  B 721            50
476                 B     DTFNM                                     I   4  1493  B L91            50
477         ALTBY   B     BYPSS                                     I   4  1497  B C49            50
478                 BSP   4                                         I   5  1501  U %U4 B          50
479         PASS2   RT    1,3997                                    I   8  1506  M %U1 I97 R      51
480                 RT    1,3997                                    I   8  1514  M %U1 I97 R      51
481                 SBR   TDF1&7,341                                I   7  1522  H P30 341        51
482                 B     CTAPE                                     I   4  1529  B S22            51
483                 NOP   TDF1                                      I   4  1533  N P23            51
484                 B     OVLY3                                     I   4  1537  B 341            51
485         *
486         NUMERC  SBR   INDEX1                                    I   4  1541  H 089            51
487                 MCW   2&X1,INDEX1                               I   7  1545  M 0'2 089        52
488                 SW    MAINX&20                                  I   4  1552  , 021            52
489                 MCW   MAINX&20,DTFTAB&X1                        I   7  1556  M 021 3U9        52
490                 B     DIFREC                                    I   4  1563  B M06            52
491         KDIOCS  DCW   @DIOCS@                                   I   5  1571                   52
492         BLORB   B     SCANX                                     I   4  1572  B N55            52
493                 A     MAINX&18&X3,BLOWA-1                       I   7  1576  A 0A9 W01        52
494                 LCA   BLOWA-1,DTFTAB&24                         I   7  1583  L W01 373        53
495                 S     BLOWA                                     I   4  1590  S W02            53
496                 B     EITHER                                    I   4  1594  B 333            53
497         BLOWA   DCW   &00000                                    I   5  1602                   53
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

498               LTORG *                                                I          1603
                  DCW   @JOB@                                            I   3  1605              LIT     53
                  DCW   @CTL@                                            I   3  1608              LIT     53
                  DCW   @456@                                            I   3  1611              LIT     53
            NORDRL DCW  #01                                              I   1  1612              AREA    54
                  DCW   @M@                                              I   1  1613              LIT     54
                  DCW   @DTF@                                            I   3  1616              LIT     54
                  DCW   @W@                                              I   1  1617              LIT     54
            SCNSWI DCW  #01                                              I   1  1618              AREA    54
                  DCW   @7@                                              I   1  1619              LIT     54
                  DCW   @$@                                              I   1  1620              LIT     54
                  DCW   @   @                                            I   3  1623              LIT     55
            OPDARI DCW  #03                                              I   3  1626              AREA    55
                  DCW   @  @                                             I   2  1628              LIT     55
                  DCW   @52@                                             I   2  1630              LIT     55
                  DCW   @1@                                              I   1  1631              LIT     55
                  DCW   @YES@                                            I   3  1634              LIT     55
                  DCW   @TAP@                                            I   3  1637              LIT     55
                  DCW   @12@                                             I   2  1639              LIT     56
                  DCW   @9@                                              I   1  1640              LIT     56
            IERRCT DCW  #01                                              I   1  1641              AREA    56
            IERASC DCW  #02                                              I   2  1643              AREA    56
                  DCW   &DTFTAB&X                                        I   3  1646  3U9         ADCON   56
499               ORG   1649                                             I          1649
500         OVER  DCW   @}@                                              I   1  1649              GMARK   57
501               EX                                                     I          B 000             58
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

502               JOB   1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 1 -VERSION 3 I
503               ORG   1650                                             I          1650
504               SFX   I                                                I
505         *
506         *               DTF  TABLE  OF  BRANCHES
507         *
508         DTFINT SBR    INDEX3,DTFLAB                                  I   7  1650  H 099 H03          61
509               SBR     CHAIR&3,LSTPAR                                 I   7  1657  H O66 O75          61
510               BCE     DIFREC,MAINX&20,                               I   8  1664  B M06 021          61
511               CW      SCNSW                                          I   4  1672  ) W18             61
512               C       MAINX&6,@EX@                                   I   7  1676  C 007 H48          61
513               BE      EXIRB                                          I   5  1683  B !31 S           61
514               S       INDEX2&1                                       I   4  1688  S 095             62
515         SEEK  C       MAINX&7,0&X3                                   I   7  1692  C 008 0?0         62
516               SBR     INDEX3                                         I   4  1699  H 099             62
517               BE      AGREE                                          I   5  1703  B Z35 S           62
518               BCE     DIFREC,0&X3,@                                  I   8  1708  B M06 0?0 @       62
519               A       @7@,INDEX2                                     I   7  1716  A H49 094         62
520               B       SEEK                                           I   4  1723  B W92             62
521         DTFBR B       OPDSCN                                         I   4  1727  B O14             63
522               DCW     REWXZ                  REWIND                  I   3  1733  E00               63
523               B       ACTUAL                                         I   4  1734  B !89             63
524               DCW     &DTFTAB&205            REELSEQ                 I   3  1740  554               63
525               B       ACTUAL                                         I   4  1741  B !89             63
526               DCW     &DTFTAB&108            SERIALNUM               I   3  1747  457               63
527               B       HEARB                                          I   4  1748  B N37             63
528               DCW     &DTFTAB&103                                    I   3  1754  452               64
529               B       OPDSCN                                         I   4  1755  B O14             64
530               DCW     &CHEXZ                 CHECKLABEL              I   3  1761  D87               64
531               B       OPDSCN                                         I   4  1762  B O14             64
532               DCW     &TYPXZ                 TYPELABEL               I   3  1768  D74               64
533               B       TOTRB                                          I   4  1769  B Z81             64
534               DCW     #3                     TOTALS                  I   3  1775                    64
535               B       ACTUAL                                         I   4  1776  B !89             65
536               DCW     &DTFTAB&75             WLRADDR                 I   3  1782  424               65
537               B       ACTUAL                                         I   4  1783  B !89             65
538               DCW     &DTFTAB&65             EOFADDR                 I   3  1789  414               65
539               B       INDRB                                          I   4  1790  B !71             65
540               DCW     #3                     INDEXREG                I   3  1796                    65
541               B       ACTUAL                                         I   4  1797  B !89             65
542               DCW     &DTFTAB&54             WORKAREA                I   3  1803  403               66
543               B       IOARB                                          I   4  1804  B Z47             66
544               DCW     &DTFTAB&44             IOAREAS                 I   3  1810  393               66
545               B       BLORB                                          I   4  1811  B V72             66
546               DCW     &DTFTAB&24             BLOCKSIZE               I   3  1817  373               66
547               B       NUMERC                                         I   4  1818  B V41             66
548               DCW     @020@                  PADDING                 I   3  1824                    66
549               B       ACTUAL                                         I   4  1825  B !89             67
550               DCW     &DTFTAB&19             SIXEREC                 I   3  1831  368               67
551               B       OPDSCN                                         I   4  1832  B O14             67
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

552                 DCW   &RECXZ                  RECFORM        I   3  1838  D55               67
553                 B     NUMERC                                 I   4  1839  B V41             67
554                 DCW   @011@                    ALTTAPE        I   3  1845                    67
555                 B     NUMERC                                 I   4  1846  B V41             67
556                 DCW   @010@                    CARDPROC       I   3  1852                    68
557                 B     OPDSCN                                 I   4  1853  B O14             68
558                 DCW   &MODXZ                   MODEPAR        I   3  1859  D30               68
559                 B     OPDSCN                                 I   4  1860  B O14             68
560                 DCW   &FILXZ                   FILETYPE       I   3  1866  D23               68
561                 B     NUMERC                                 I   4  1867  B V41             68
562                 DCW   @009@                    CHANDRIVE      I   3  1873                    68
563                 B     ACTUAL                                 I   4  1874  B !89             69
564                 DCW   DTFTAB&198               VARBUILD       I   3  1880  547               69
565                 B     ACTSCN                                 I   4  1881  B /13             69
566                 DCW   &DTFTAB-7                              I   3  1887  342               69
567                 B     NUMERC                                 I   4  1888  B V41             69
568                 DCW   @206@                                  I   3  1894                    69
569                 B     OVERB                                  I   4  1895  B !06             69
570                 DCW   #1                                     I   1  1899                    70
571                 ORG   1900                                   I          1900
572                 RTW   1,1                                    I   8  1900  L %U1 001 R       70
573                 BER   HALT                                   I   5  1908  B Z21 L           70
574                 CW    OVER                                   I   4  1913  ) W49             70
575                 B     OTHER                                  I   4  1917  B 101             70
576         HALT    BSP   1                                      I   5  1921  U %U1 B           70
577                 NOP   288                                    I   4  1926  N 288             70
578                 H                                            I   1  1930  .                 71
579                 B     1900                                   I   4  1931  B Z00             71
580         *
581         AGREE   S     INDEX3&1                               I   4  1935  S 100             71
582                 SW    MAINX&20                               I   4  1939  , 021             71
583                 B     DTFBR&X2                               I   4  1943  B XK7             71
584         *               IOAREAS
585         *
586         IOARB   B     SCANX                                  I   4  1947  B N55             71
587                 LCA   MAINX&18&X3,DTFTAB&44                  I   7  1951  L 0A9 393         71
588                 BW    EITHER,SCNSW                           I   8  1958  V 333 W18 1       72
589                 B     SCANX                                  I   4  1966  B N55             72
590                 LCA   MAINX&18&X3,DTFTAB&34                  I   7  1970  L 0A9 383         72
591                 B     EITHER                                 I   4  1977  B 333             72
592         *
593         *               TOTALS
594         *
595         TOTRB   SBR   CHAIR&3,TOTJK                          I   7  1981  H O66 Z95         72
596                 B     OPDSCN                                 I   4  1988  B O14             72
597                 DCW   &TOTXZ                                 I   3  1994  E20               72
598         TOTJK   LCA   MAINX&18&X3,DTFTAB&80                  I   7  1995  L 0A9 429         73
599                 B     LSTPAR                                 I   4  2002  B O75             73
600         OVERB   SBR   CHAIR&3,OVEJK                          I   7  2006  H O66 !20         73
601                 B     OPDSCN                                 I   4  2013  B O14             73
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

602                 DCW   &OVEXZ                                 I   3  2019  E13               73
603         OVEJK   LCA   MAINX&18&X3,DTFTAB&216                 I   7  2020  L 0A9 565         73
604                 B     LSTPAR                                 I   4  2027  B O75             73
605         *
606         *                EXITS  ROUTINE
607         *
608         EXIRB   MCW   @1 8@,INDEX2                           I   7  2031  M H52 094         74
609                 MN    MAINX&7,INDEX2-1                       I   7  2038  D 008 093         74
610                 S     INDEX3&1                               I   4  2045  S 100             74
611                 B     SCANX                                  I   4  2049  B N55             74
612                 LCA   MAINX&18&X3,DTFTAB&X2                  I   7  2053  L 0A9 3M9         74
613                 LCA   @$@,DTFTAB-6                           I   7  2060  L H53 343         74
614                 B     DIFREC                                 I   4  2067  B M06             75
615         *
616         *              INDEX  REGISTER
617         *
618         INDRB   MN    MAINX&21,DTFTAB&55                     I   7  2071  D 022 404         75
619                 MZ    @ @,DTFTAB&55                          I   7  2078  Y H54 404         75
620                 B     DIFREC                                 I   4  2085  B M06             75
621         *
622         *                LOAD PARAMETERS - ACTUAL
623         *
624         ACTUAL  SBR   INDEX1                                 I   4  2089  H 089             75
625                 BW    EITHER,SCNSW                           I   8  2093  V 333 W18 1       75
626                 MCW   2&X1,INDEX1                            I   7  2101  M 0'2 089         76
627         SEARCH  B     SCANX                                  I   4  2108  B N55             76
628                 LCA   MAINX&18&X3,0&X1                       I   7  2112  L 0A9 0'0         76
629                 SBR   INDEX1                                 I   4  2119  H 089             76
630                 BW    DIFREC,SCNSW                           I   8  2123  V M06 W18 1       76
631                 B     SEARCH                                 I   4  2131  B J08             76
632         NEWWRT  SBR   WRTEXT&3                               I   4  2135  H 761             76
633                 MCW   LMAINX,LOPUT-1                        I   7  2139  M 086 I97         77
634                 SW    OUTPT&80                               I   4  2146  , I92             77
635                 MCW   GMWMRK,OUTPT&80                        I   7  2150  M 773 I92         77
636         LONG    MCW   @*@,OUTPT&73                         I   7  2157  M H55 I85         77
637                 B     SHORT                                  I   4  2164  B 750             77
638         *
639         *                OUTPUT  MACRO  STATEMENT  FOR  DIOC
640         *
641         CRDOUT  MN    @5@,TDF6&4                             I   7  2168  D H56 768         77
642                 CS    LMAINX                                 I   4  2175  / 086             78
643                 MCW   @55555@,MAINX&19                       I   7  2179  M H61 020         78
644                 SBR   INDEX3,ENDDIO                          I   7  2186  H 099 622         78
645                 B     GOOD&4                                 I   4  2193  B K01             78
646         GOOD    CS    LMAINX                                 I   4  2197  / 086             78
647                 SW    1                                      I   4  2201  , 001             78
648                 SBR   INDEX1,MAINX&20                        I   7  2205  H 089 021         78
649                 MCW   @'@,MAINX&72                          I   7  2212  M H62 073         79
650         LODPAR  MCW   0&X3,WKAREA-1                         I   7  2219  M 0?0 L89         79
651                 SBR   INDEX2                                 I   4  2226  H 094             79
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
652                 MCW   INDEX1,SAVXL1#3                          I   7  2230  M 089 H65          79
653                 MCM   1&X2,0&X1                                 I   7  2237  P 0!1 0'0          79
654                 SBR   INDEX1                                    I   4  2244  H 089              79
655                 MCW   @, @,0&X1                                 I   7  2248  M H67 0'0          80
656                 BCE   CONTIN,MAINX&72,'                         I   8  2255  B L01 073 '        80
657                 MCW   SAVXL1,INDEX1                             I   7  2263  M H65 089          80
658                 SW    0&X1                                      I   4  2270  , 0'0              80
659                 MCW   @  @,MAINX&79                             I   7  2274  M H69 080          80
660                 MCW   MAINX&78                                  I   4  2281  M 079              80
661                 CW    0&X1                                      I   4  2285  ) 0'0              81
662                 B     NEWWRT                                    I   4  2289  B J35              81
663                 CW    OUTPT&80                                  I   4  2293  ) I92              81
664                 B     GOOD                                      I   4  2297  B J97              81
665         CONTIN  MCW   0&X3,0&X3                                 I   7  2301  M 0?0 0?0          81
666                 SBR   INDEX3                                    I   4  2308  H 099              81
667         COMBLK  C     0&X3,@ @                                  I   7  2312  C 0?0 H54          81
668                 SAR   INDEX3                                    I   4  2319  Q 099              82
669                 BE    COMBLK                                    I   5  2323  B L12 S            82
670                 A     @1@,INDEX3                                I   7  2328  A H70 099          82
671                 B     ALLDIO,0&X3,,                             I   8  2335  B L47 0?0 ,        82
672                 B     LODPAR                                    I   4  2343  B K19              82
673         ALLDIO  MCW   @  @,0&X1                                 I   7  2347  M H69 0'0          82
674                 MCW   @ @,MAINX&72                              I   7  2354  M H54 073          83
675                 B     NEWWRT                                    I   4  2361  B J35              83
676                 CW    OUTPT&80                                  I   4  2365  ) I92              83
677                 MN    @6@,TDF6&4                                I   7  2369  D H71 768          83
678         BETTER  B     PASSI                                     I   4  2376  B U60              83
679         WKAREA  DCW   @          '@                             I  11  2390                     83
680         DTFNM   S     INDEX3&1                                  I   4  2391  S 100              84
681                 B     SCANX                                     I   4  2395  B N55              84
682                 LCA   MAINX&18&X3,FILENM                        I   7  2399  L 0A9 349          84
683         DIFREC  B     REDREC                                    I   4  2406  B 774              84
684         DELTA   BCE   ALPHA,MAINX&5,*                           I   8  2410  B M30 006 *        84
685                 C     MAINX&19,@     @                          I   7  2418  C 020 H76          84
686                 BU    DTFOUT                                    I   5  2425  B M46 /            84
687         ALPHA   B     WRTREC                                    I   4  2430  B 721              85
688                 BCE   DIFREC,MAINX&5,*                          I   8  2434  B M06 006 *        85
689                 B     DTFINT                                    I   4  2442  B W50              85
690         DTFOUT  MN    @5@,TDF6&4                                I   7  2446  D H56 768          85
691                 SBR   INDEX3,ENDDTF                             I   7  2453  H 099 567          85
692                 B     SAVCD                                     I   4  2460  B O98              85
693                 SBR   WALK&3,ALTBY                              I   7  2464  H Q99 U97          86
694                 C     MAINX&17,@DTF@                            I   7  2471  C 018 H79          86
695                 CS    LMAINX                                    I   4  2478  / 086              86
696                 MCW   @33333@,MAINX&19                          I   7  2482  M H84 020          86
697                 BE    SETDSW                                    I   5  2489  B N05 S            86
698         RIVER   SBR   BETTER&3,PASS2                           I   7  2494  H L79 V06          86
699                 B     GOOD&4                                    I   4  2501  B K01              87
700         SETDSW  SBR   BETTER&3,RNDTF                            I   7  2505  H L79 N16          87
701                 B     GOOD&4                                    I   4  2512  B K01              87
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
702         RNDTF   RTW   1,341                                     I   8  2516  L %U1 341 R        87
703                 BSP   1                                         I   5  2524  U %U1 B            87
704                 CW    DTFGM                                     I   4  2529  ) 568              87
705                 B     PASSI                                     I   4  2533  B U60              87
706         HEARB   B     SCANX                                     I   4  2537  B N55              88
707                 MCW   MAINX&18&X3,DTFTAB&103                    I   7  2541  M 0A9 452          88
708                 B     ACTUAL                                    I   4  2548  B !89              88
709                 DCW   &DTFTAB&93                                I   3  2554  442                88
710         *
711         *               SCAN FOR A COMMA OR TWO BLANKS
712         *
713         SCANX   SBR   CLUBS&3                                   I   4  2555  H O13              88
714         SCANL   SW    MAINX&20                                  I   4  2559  , 021              88
715                 C     MAINX&21&X3,@  @                          I   7  2563  C 0B2 H69          88
716                 A     @1@,INDEX3                                I   7  2570  A H70 099          89
717                 BE    SETIT                                     I   5  2577  B O02 S            89
718                 BCE   SETWMS,MAINX&19&X3,,                      I   8  2582  B O06 0B0 ,        89
719                 C     INDEX3,@52@                               I   7  2590  C 099 H86          89
720                 BU    SCANL                                     I   5  2597  B N59 /            89
721         SETIT   SW    SCNSW                                     I   4  2602  , W18              89
722         SETWMS  SW    MAINX&20&X3                               I   4  2606  , 0B1              90
723         CLUBS   B     0                                         I   4  2610  B 000              90
724         *
725         *               SCAN   OPERAND TABLE
726         *
727         *
728         OPDSCN  SBR   INDEX2                                    I   4  2614  H 094              90
729                 MCW   2&X2,SAVX2                                I   7  2618  M 0!2 H89          90
730         OPDRTN  B     NEWSCN                                    I   4  2625  B '06              90
731                 MCW   SAVX2#3,INDEX2                            I   7  2629  M H89 094          90
732         SEEKOP  C     OPDAR,0&X2                                I   7  2636  C W26 0!0          90
733                 SBR   INDEX2                                    I   4  2643  H 094              91
734                 MCW   0&X2,INDEX1                               I   7  2647  M 0!0 089          91
735                 SAR   INDEX2                                    I   4  2654  Q 094              91
736                 BE    OPDFND                                    I   5  2658  B O87 S            91
737         CHAIR   BCE   LSTPAR,0&X2,@                            I   8  2663  B O75 0!0 @        91
738                 B     SEEKOP                                    I   4  2671  B O36              91
739         LSTPAR  BW    EITHER,SCNSW                              I   8  2675  V 333 W18 1        92
740                 B     OPDRTN                                    I   4  2683  B O25              92
741         OPDFND  LCA   @$@,DIOCSB&X1                             I   7  2687  L H53 5X6          92
742                 B     LSTPAR                                    I   4  2694  B O75              92
743         SAVCD   SBR   SVCDX&3                                   I   4  2698  H P20              92
744                 CS    186                                       I   4  2702  / 186              92
745                 SW    101                                       I   4  2706  , 101              92
746                 MCW   LMAINX,186                                I   7  2710  M 086 186          93
747         SVCDX   B     0                                         I   4  2717  B 000              93
748         *
749         *               READ  IN  OVERLAY  TWO
750         *
751         TDF1    DCW   #3                                        I   3  2723                     93
```

```
SEQ PG LIN  LABEL    OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
752              RTW   1,101                                        I   8  2724  L %U1 101 R         93
753         OVLAY2 SW    GMOVL2                                     I   4  2732  , 332               93
754              MCW   GMWMRK,GMOVL2                                I   7  2736  M 773 332           93
755              RT    1,101                                        I   8  2743  M %U1 101 R         94
756              B     CTAPE                                        I   4  2751  B S22              94
757              NOP   TDF1                                         I   4  2755  N P23              94
758              B     PUNCH                                        I   4  2759  B 101              94
759         *
760         *              ALTER PART OF IOCS
761         *
762         ALTER  B     CTAPE                                      I   4  2763  B S22              94
763              NOP   TDF4A                                        I   4  2767  N A35              94
764              MCW   OUTPT&7,SYMNM                                I   7  2771  M I19 340          94
765              BSS   OUTCL,C                                      I   5  2778  B 119 C            95
766              BSP   4                                            I   5  2783  U %U4 B            95
767              SBR   RIVER&6,TUNEL                                I   7  2788  H N00 Q88          95
768              SBR   PREPS2&3                                     I   4  2795  H 665              95
769              R                                                  I   1  2799  1                  95
770              C     MAINX&17,@ALT@                               I   7  2800  C 018 H92          95
771              BU    WALK                                         I   5  2807  B Q96 /            95
772         HOMAL  B     SAVXX                                      I   4  2812  B C19              96
773              B     PACKX                                        I   4  2816  B R43              96
774         NOALTB B     CTAPE                                      I   4  2820  B S22              96
775              NOP   TDF4A                                        I   4  2824  N A35              96
776              C     OUTPT&83,HLDA1                               I   7  2828  C I95 I02          96
777              BE    CHECK                                        I   5  2835  B ?05 S            96
778         PROPRE C     OUTPT&17,@JOB@                             I   7  2840  C I29 H95          96
779         ALTS1  BU    ALTS2E                                     I   5  2847  B Q60 /            97
780              B     NOPJB                                        I   4  2852  B 205              97
781              B     NOTER                                        I   4  2856  B 220              97
782         ALTS2E C     OUTPT&17,@CTL@                             I   7  2860  C I29 H98          97
783         ALTS2  BE    OUTCL                                      I   5  2867  B 119 S            97
784         SOLVED MCW   OUTPT&85,LMAINX                            I   7  2872  M I97 086          97
785              SW    READS                                        I   4  2879  , I10              97
786         ALTIO  BSS   REGEN,G                                    I   5  2883  B A44 G            98
787         TUNEL  BW    BSPT4,READS                                I   8  2888  V R04 I10 1        98
788         WALK   B     SAVCD                                      I   4  2896  B O98              98
789              B     ALTBY                                        I   4  2900  B U97              98
790         BSPT4  BW    REGL,XCARDS                                I   8  2904  V R27 I09 1        98
791              MN    @5@,TDF6&4                                   I   7  2912  D H56 768          98
792              B     NEWWRT                                       I   4  2919  B J35              99
793              B     REGL&5                                       I   4  2923  B R32              99
794         REGL   BSP   4                                          I   5  2927  U %U4 B            99
795              LCA   AREASV,186                                   I   7  2932  L 331 186          99
796              B     ALTBY                                        I   4  2939  B U97              99
797         PACKX  SBR   PACKS&3                                    I   4  2943  H ?04              99
798              SW    BALTR                                        I   4  2947  , I03              99
799              CW    SCNSW                                        I   4  2951  ) W18             100
800              S     INDEX3&1                                     I   4  2955  S 100             100
801              B     SCANX                                        I   4  2959  B N55             100
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SEQ PG LIN  LABEL    OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
802              ZA    MAINX&18&X3,HLDA1#4                          I   7  2963  ? 0A9 I02          100
803              BW    PARKS,SCNSW                                  I   8  2970  V R93 W18 1        100
804              B     SCANX                                        I   4  2978  B N55              100
805              ZA    MAINX&18&X3,HLDB                             I   7  2982  ? 0A9 I07          100
806              CW    BALTR#1                                      I   4  2989  ) I03              101
807         PARKS  CS    LMAINX                                     I   4  2993  / 086              101
808              SW    1                                            I   4  2997  , 001              101
809         PACKS  B     0                                          I   4  3001  B 000              101
810         *
811         *              ALTER  NUMBER  COMPARES  EQUAL
812         *
813         CHECK  BW    WRTAL,BALTR                                I   8  3005  V ?37 I03 1        101
814         DBLAL  C     OUTPT&83,HLDB#4                            I   7  3013  C I95 I07          101
815              BE    WRTAL                                        I   5  3020  B ?37 S            101
816              B     CTAPE                                        I   4  3025  B S22              102
817              NOP   TDF4A                                        I   4  3029  N A35              102
818              B     DBLAL                                        I   4  3033  B ?13              102
819         WRTAL  BLC   TUNEL                                      I   5  3037  B Q88 A            102
820              R                                                  I   1  3042  1                  102
821              C     MAINX&17,@ALT@                               I   7  3043  C 018 H92          102
822              BE    HOMAL                                        I   5  3050  B Q12 S            102
823              C     MAINX&17,@JOB@                               I   7  3055  C 018 H95          103
824         ALTS3  BU    ALTS4E                                     I   5  3062  B ?75 /            103
825              B     NOPJB                                        I   4  3067  B 205              103
826              B     RSOLV                                        I   4  3071  B 175              103
827         ALTS4E C     MAINX&17,@CTL@                             I   7  3075  C 018 H98          103
828         ALTS4  BE    CRDCL                                      I   5  3082  B 138 S            103
829              BW    TUFF,BALTR                                   I   8  3087  V A03 I03 1        104
830              CW    READS                                        I   4  3095  ) I10              104
831              B     ALTIO                                        I   4  3099  B Q83              104
832         TUFF   B     SAVXX                                      I   4  3103  B C19              104
833              CW    XCARDS                                       I   4  3107  ) I09              104
834              SBR   RSOLV&7,SOLVED                               I   7  3111  H 182 Q72          104
835              SBR   CHUCK&3                                      I   4  3118  H 234              104
836              MCW   @N@,NOSOL                                    I   7  3122  M I08 131          105
837              B     PROPRE                                       I   4  3129  B Q40              105
838         *
839         *              TDF  FOR  READING  86  CHARACTER  RECORDS
840         *
841         TDF4A  DCW   TUNEL                                      I   3  3135  Q88                105
842              RT    4,OUTPT                                      I   8  3136  M %U4 I12 R         105
843         *
844         *              REGENERATION  OF  DIOCS  AND  DTF
845         *
846         REGEN  BW    ORDN,XCARDS                                I   8  3144  V A85 I09 1        105
847              SBR   NEXREC&3,SPCAS                               I   7  3152  H 684 A74          105
848              SBR   ALDIO-1,SOFT                                 I   7  3159  H B02 B68          106
849              CW    READS                                        I   4  3166  ) I10              106
850              B     FIND                                         I   4  3170  B 642              106
851         SPCAS  MCW   AREASV,LMAINX                              I   7  3174  M 331 086          106
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

852               SW    XCARDS#1                                   I   4  3181  , I09              106
853         ORDN  SBR   NEXREC&3,ALDIO                             I   7  3185  H 684 B03          106
854               SBR   DIFREC&3,ALDTF                             I   7  3192  H M09 C08         107
855               B     FIND                                       I   4  3199  B 642             107
856         ALDIO CS    LMAINX                                     I   4  3203  / 086             107
857               BW    RDT4A,READS                                I   8  3207  V B41 I10 1       107
858               BLC   LUNET                                      I   5  3215  B C34 A           107
859               R                                                I   1  3220  1                 107
860               C     MAINX&17,@ALT@                             I   7  3221  C 018 H92         107
861               BU    SOFT                                       I   5  3228  B B68 /           108
862               B     SAVXX                                      I   4  3233  B C19             108
863               B     PACKX                                      I   4  3237  B R43             108
864         RDT4A B     BYPSS                                      I   4  3241  B C49             108
865               C     OUTPT&83,HLDA1                             I   7  3245  C I95 I02         108
866         FINAL BE    DBLCK                                      I   5  3252  B B72 S           108
867               SW    READS                                      I   4  3257  , I10             108
868         FINAL2 MCW  OUTPT&85,LMAINX                            I   7  3261  M I97 086         109
869         SOFT  B     GAMMA                                      I   4  3268  B 685             109
870         DBLCK CW    READS#1                                    I   4  3272  ) I10             109
871               BW    FINAL2,BALTR                               I   8  3276  V B61 I03 1       109
872         TRPCK C     OUTPT&83,HLDB                              I   7  3284  C I95 I07         109
873               BE    ALDIO                                      I   5  3291  B B03 S           109
874               B     CTAPE                                      I   4  3296  B S22             109
875               NOP   TDF4A                                      I   4  3300  N A35             110
876               B     TRPCK                                      I   4  3304  B B84             110
877         *
878         *               DTF  ON  ALTER  MODE
879         *
880         ALDTF SBR   SOFT&3,DELTA                               I   7  3308  H B71 M10         110
881               B     ALDIO                                      I   4  3315  B B03             110
882         SAVXX SBR   SAVXT&3                                    I   4  3319  H C33             110
883               MCW   LMAINX,AREASV                              I   7  3323  M 086 331         110
884         SAVXT B     0                                          I   4  3330  B 000             110
885         LUNET SW    READS                                      I   4  3334  , I10             111
886               MCW   @N@,FINAL                                  I   7  3338  M I08 B52         111
887               B     RDT4A                                      I   4  3345  B B41             111
888         BYPSS SBR   BYPSX&3                                    I   4  3349  H C80             111
889               B     CTAPE                                      I   4  3353  B S22             111
890               NOP   TDF4A                                      I   4  3357  N A35             111
891               BCE   BYPSS&4,OUTPT&74,Y                         I   8  3361  B C53 I86 Y       111
892               BCE   BYPSS&4,OUTPT&74,Z                         I   8  3369  B C53 I86 Z       112
893         BYPSX B     0                                          I   4  3377  B 000             112
894         *
895         *               DTF  TABLE  OF  OPERANDS
896         *
897               DCW   @@@                  FILETYP               I   1  3381                   112
898               DCW   @001@                                      I   3  3384                   112
899               DCW   @INP@                     INPUT            I   3  3387                   112
900               DCW   @002@                                      I   3  3390                   112
901               DCW   @OUT@                     OUTPUT           I   3  3393                   112
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

902               DCW   @003@                                      I   3  3396                   113
903               DCW   @TAP@                     TAPE             I   3  3399                   113
904               DCW   @004@                                      I   3  3402                   113
905               DCW   @REA@                     READER           I   3  3405                   113
906               DCW   @005@                                      I   3  3408                   113
907               DCW   @PUN@                     PUNCH            I   3  3411                   113
908               DCW   @008@                                      I   3  3414                   113
909               DCW   @CHE@                                      I   3  3417                   114
910               DCW   @006@                                      I   3  3420                   114
911         FILXZ DCW   @PRI@                     PRINTER          I   3  3423                   114
912               DCW   @@@                  MODEPAR               I   1  3424                   114
913               DCW   @007@                                      I   3  3427                   114
914         MODXZ DCW   @LOA@                                      I   3  3430                   114
915               DCW   @@@                  RECFORM               I   1  3431                   114
916               DCW   @012@                                      I   3  3434                   115
917               DCW   @BLO@                     BLOCKED          I   3  3437                   115
918               DCW   @013@                                      I   3  3440                   115
919               DCW   @UNB@                     UNBLOCKED        I   3  3443                   115
920               DCW   @014@                                      I   3  3446                   115
921               DCW   @FIX@                          FIXED       I   3  3449                   115
922               DCW   @015@                                      I   3  3452                   115
923         RECXZ DCW   @VAR@                     VARIABLE         I   3  3455                   116
924               DCW   @@@                  TYPELABEL             I   1  3456                   116
925               DCW   @081@                                      I   3  3459                   116
926               DCW   @STA@                     STANDARD         I   3  3462                   116
927               DCW   @082@                                      I   3  3465                   116
928               DCW   @NON@                     NONSTANDARD      I   3  3468                   116
929               DCW   @083@                                      I   3  3471                   116
930         TYPXZ DCW   @TM @                     TM               I   3  3474                   117
931               DCW   @@@                  CHECKLABEL            I   1  3475                   117
932               DCW   @084@                                      I   3  3478                   117
933               DCW   @ALL@                     ALL              I   3  3481                   117
934               DCW   @085@                                      I   3  3484                   117
935         CHEXZ DCW   @IDE@                     IDENT            I   3  3487                   117
936               DCW   @@@                  REWIND                I   1  3488                   117
937               DCW   @199@                                      I   3  3491                   118
938               DCW   @UNL@                     UNLOAD           I   3  3494                   118
939               DCW   @200@                                      I   3  3497                   118
940         REWXZ DCW   @NOR@                     NOREWD           I   3  3500                   118
941               DCW   @@@                                        I   1  3501                   118
942               DCW   @201@                                      I   3  3504                   118
943               DCW   @9  @                                      I   3  3507                   118
944               DCW   @202@                                      I   3  3510                   119
945         OVEXZ DCW   @12 @                                      I   3  3513                   119
946               DCW   @@@                                        I   1  3514                   119
947               DCW   @076@                                      I   3  3517                   119
948         TOTXZ DCW   @REC@                                      I   3  3520                   119
949         *
950         *               DIOCS  OPERAND  TABLE
951         *
```

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 952                DCW   @@@                                       I   1  3521                    119
 953                DCW   -MINUS3&4                                 I   3  3524  I9C               119
 954                DCW   @OUT@                                     I   3  3527                    120
 955                DCW   -MINUS2&4                                 I   3  3530  I9D               120
 956         TAPTB  DCW   @INP@                                     I   3  3533                    120
 957                DCW   @@@                                       I   1  3534                    120
 958                DCW   @045@                                     I   3  3537                    120
 959                DCW   @REL@                                     I   3  3540                    120
 960                DCW   @046@                                     I   3  3543                    120
 961                DCW   @STO@                                     I   3  3546                    121
 962                DCW   @006@                                     I   3  3549                    121
 963         FEATB  DCW   @OVE@                    OVERLAP         I   3  3552                    121
 964                DCW   @@@                                       I   1  3553                    121
 965                DCW   @007@                                     I   3  3556                    121
 966                DCW   @TAP@                    TAPE            I   3  3559                    121
 967                DCW   @008@                                     I   3  3562                    121
 968                DCW   @REA@                    READER          I   3  3565                    122
 969                DCW   @009@                                     I   3  3568                    122
 970                DCW   @PUN@                    PUNCH           I   3  3571                    122
 971                DCW   @010@                                     I   3  3574                    122
 972         IODTB  DCW   @PRI@                    PRINTER         I   3  3577                    122
 973                DCW   @@@                                       I   1  3578                    122
 974                DCW   @011@                                     I   3  3581                    122
 975                DCW   @STA@                    STANDARD        I   3  3584                    123
 976                DCW   @012@                                     I   3  3587                    123
 977                DCW   @NON@                    NONSTANDARD     I   3  3590                    123
 978                DCW   @013@                                     I   3  3593                    123
 979                DCW   @MIX@                    MIXED           I   3  3596                    123
 980                DCW   @014@                                     I   3  3599                    123
 981                DCW   @CHE@                    CHECK           I   3  3602                    123
 982                DCW   @015@                                     I   3  3605                    124
 983                DCW   @IDE@                    IDENT           I   3  3608                    124
 984                DCW   @026@                                     I   3  3611                    124
 985                DCW   @RDL@                                     I   3  3614                    124
 986                DCW   @016@                                     I   3  3617                    124
 987         LABTB  DCW   @TM @                    TM              I   3  3620                    124
 988                DCW   @@@                                       I   1  3621                    124
 989                DCW   @018@                                     I   3  3624                    125
 990                DCW   @1  @                    EXIT 1          I   3  3627                    125
 991                DCW   @019@                                     I   3  3630                    125
 992                DCW   @2  @                    EXIT 2          I   3  3633                    125
 993                DCW   @020@                                     I   3  3636                    125
 994                DCW   @3  @                    EXIT 3          I   3  3639                    125
 995                DCW   @021@                                     I   3  3642                    125
 996                DCW   @4  @                    EXIT 4          I   3  3645                    126
 997                DCW   @022@                                     I   3  3648                    126
 998                DCW   @5  @                    EXIT 5          I   3  3651                    126
 999                DCW   @023@                                     I   3  3654                    126
1000                DCW   @6  @                    EXIT 6          I   3  3657                    126
1001                DCW   @024@                                     I   3  3660                    126
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
1002                DCW   @7  @                    EXIT 7          I   3  3663                    126
1003                DCW   @025@                                     I   3  3666                    127
1004         EXITB  DCW   @8  @                    EXIT 8          I   3  3669                    127
1005                DCW   @@@                                       I   1  3670                    127
1006                DCW   @027@                                     I   3  3673                    127
1007                DCW   @729@                    729             I   3  3676                    127
1008                DCW   @028@                                     I   3  3679                    127
1009         DRITB  DCW   @733@                    7330            I   3  3682                    127
1010                DCW   @@@                                       I   1  3683                    128
1011                DCW   @029@                                     I   3  3686                    128
1012                DCW   @NOR@                    NO RWED         I   3  3689                    128
1013                DCW   @030@                                     I   3  3692                    128
1014         RWDTB  DCW   @UNL@                    UNLOAD          I   3  3695                    128
1015                DCW   @@@                                       I   1  3696                    128
1016                DCW   @037@                                     I   3  3699                    128
1017                DCW   @REC@                    RECORD          I   3  3702                    129
1018                DCW   @038@                                     I   3  3705                    129
1019         COUTB  DCW   @HAS@                    HASH            I   3  3708                    129
1020                DCW   @@@                                       I   1  3709                    129
1021                DCW   @034@                                     I   3  3712                    129
1022                DCW   @CLE@                                     I   3  3715                    129
1023                DCW   @033@                                     I   3  3718                    129
1024                DCW   @PRO@                                     I   3  3721                    130
1025                DCW   @032@                                     I   3  3724                    130
1026         REATB  DCW   @SCA@                                     I   3  3727                    130
1027         *
1028         *              DTF  TABLE  OF  LABELS
1029         *
1030                DCW   @@@                                       I   1  3728                    130
1031                DCW   @OVE@               OVERFLOW              I   3  3731                    130
1032                DCW   @FOR@               FORMSCTL              I   3  3734                    130
1033                DCW   @COB@               COBOL                 I   3  3737                    130
1034                DCW   @VAR@               VARBUILD              I   3  3740                    131
1035                DCW   @CHA@               CHANDRIVE             I   3  3743                    131
1036                DCW   @FIL@               FILETYPE              I   3  3746                    131
1037                DCW   @MOD@               MODEPAR               I   3  3749                    131
1038                DCW   @CAR@               CARDPROC              I   3  3752                    131
1039                DCW   @ALT@               ALTTAPE               I   3  3755                    131
1040                DCW   @REC@               RECFORM               I   3  3758                    131
1041                DCW   @SIZ@               SIZEREC               I   3  3761                    132
1042                DCW   @PAD@               PADDING               I   3  3764                    132
1043                DCW   @BLO@               BLOCKSIZE             I   3  3767                    132
1044                DCW   @IOA@               IOAREAS               I   3  3770                    132
1045                DCW   @WOR@               WORKAREA              I   3  3773                    132
1046                DCW   @IND@               INDEXREC              I   3  3776                    132
1047                DCW   @EOF@               EOFADDR               I   3  3779                    132
1048                DCW   @WLR@               WLRADDR               I   3  3782                    133
1049                DCW   @TOT@               TOTALS                I   3  3785                    133
1050                DCW   @TYP@               TYPELABEL             I   3  3788                    133
1051                DCW   @CHE@               CHECKLABEL            I   3  3791                    133
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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

1052                DCW   @HEA@               HEADER               I   3  3794                    133
1053                DCW   @SER@               SERIALNUM            I   3  3797                    133
1054                DCW   @REE@               REELSER              I   3  3800                    133
1055         DTFLAB DCW   @REW@               REWIND               I   3  3803                    134
1056         *
1057         *
1058         *              LABEL TABLE
1059         *
1060                DCW   @@@                                       I   1  3804                    134
1061                DCW   @TAP@              TAPEUSE              I   3  3807                    134
1062                DCW   @CHE@              CHECKPOINT           I   3  3810                    134
1063                DCW   @DIO@              DIOCSORG             I   3  3813                    134
1064                DCW   @FEA@              FEATURES             I   3  3816                    134
1065                DCW   @IOD@              IODEVICES            I   3  3819                    134
1066                DCW   @LAB@              LABELDEF             I   3  3822                    135
1067                DCW   @ALT@              ALTTAPE              I   3  3825                    135
1068                DCW   @EXI@              EXITS                I   3  3828                    135
1069                DCW   @VAR@              VARBUILD             I   3  3831                    135
1070                DCW   @COU@              COUNTS               I   3  3834                    135
1071                DCW   @DRI@              DRIVETYPE            I   3  3837                    135
1072                DCW   @RWD@              RWDOPTION            I   3  3840                    135
1073                DCW   @REA@              READERROR            I   3  3843                    136
1074         LBLTBL DCW   @INP@              INPFXNO              I   3  3846                    136
1075                LTORG *                                       I            3847
                    DCW   @EX@                                    I   2  3848             LIT    136
                    DCW   @7@                                     I   1  3849             LIT    136
                    DCW   @1 8@                                   I   3  3852             LIT    136
                    DCW   @$@                                     I   1  3853             LIT    136
                    DCW   @ @                                     I   1  3854             LIT    136
                    DCW   @*@                                     I   1  3855             LIT    137
                    DCW   @5@                                     I   1  3856             LIT    137
                    DCW   @55555@                                 I   5  3861             LIT    137
                    DCW   @'@                                     I   1  3862             LIT    137
             SAVXL1 DCW   #03                                     I   3  3865             AREA   137
                    DCW   @, @                                    I   2  3867             LIT    137
                    DCW   @  @                                    I   2  3869             LIT    137
                    DCW   @1@                                     I   1  3870             LIT    138
                    DCW   @6@                                     I   1  3871             LIT    138
                    DCW   @     @                                 I   5  3876             LIT    138
                    DCW   @DTF@                                   I   3  3879             LIT    138
                    DCW   @33333@                                 I   5  3884             LIT    138
                    DCW   @52@                                    I   2  3886             LIT    138
             SAVX2I DCW   #03                                     I   3  3889             AREA   138
                    DCW   @ALT@                                   I   3  3892             LIT    139
                    DCW   @JOB@                                   I   3  3895             LIT    139
                    DCW   @CTL@                                   I   3  3898             LIT    139
             HLDA1I DCW   #04                                     I   4  3902             AREA   139
             BALTRI DCW   #01                                     I   1  3903             AREA   139
             HLDBI  DCW   #04                                     I   4  3907             AREA   139
                    DCW   @N@                                     I   1  3908             LIT    139
```



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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

             XCARDS DCW   #01                                     I   1  3909             AREA   140
             READSI DCW   #01                                     I   1  3910             AREA   140
1076         *
1077         *                  OUTPUT  AREA
1078         *
1079                ORG   3912                                    I            3912
1080         OUTPT  DA    1X86,G                                  I       3912 3997
1080                DCW   @"@                                     I   1  3998             GMARK  141
1081         LOPUT  EQU   *                                       I       3998
1082                EX                                            I            B 000              142
```

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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1083               JOB   1401 AUTOCODER-PASS 2-COPY DTF TABLE      -VERSION 3 I
1084               SFX   I                                                   I
1085               ORG   341                                                 I           0341
1086               DCW   @,@                                                 I   1  0341                  145
1087               DCW   @ @              EXITS   YES                        I   1  0342                  145
1088               DCW   @ @              COBOL   YES                        I   1  0343                  145
1089               DCW   #6                                                  I   6  0349                  145
1090               DCW   @ @          1   INPUT         1   FILETYPE       I   1  0350                  145
1091               DCW   @ @          2   OUTPUT        2                  I   1  0351                  145
1092               DCW   @ @          3   TAPE          3                  I   1  0352                  145
1093               DCW   @ @          4   READER        4                  I   1  0353                  146
1094               DCW   @ @          5   PUNCH         5                  I   1  0354                  146
1095               DCW   @ @          6   PRINTER       6                  I   1  0355                  146
1096               DCW   @ @          7   LOAD          7   MODEPAR        I   1  0356                  146
1097               DCW   @ @          8   CHECKPOINT    8   FEATURES       I   1  0357                  146
1098               DCW   @ @          9   NUMBER        9   CHANDRIVE      I   1  0358                  146
1099               DCW   @ @         10   NUMBER       10   CARDPROC       I   1  0359                  146
1100               DCW   @ @         11   NUMBER       11   ALTTAPE        I   1  0360                  147
1101               DCW   @ @         12   BLOCKED      12   RECFORM        I   1  0361                  147
1102               DCW   @ @         13   UNBLOCKED    13                  I   1  0362                  147
1103               DCW   @ @         14   MIXED        14                  I   1  0363                  147
1104               DCW   @ @         15   VARIABLE     15                  I   1  0364                  147
1105               DCW   @    @   16-19 NUMBER       16   SIZEREC        I   4  0368                  147
1106               DCW   @ @         29   NUMBER       17   PADDING        I   1  0369                  147
1107               DCW   @    @   21-24 NUMBER       18   BLOCKSIZE      I   4  0373                  148
1108               DCW   @          @   25-34   LABELS  19   IOAREAS        I  10  0383                  148
1109               DCW   @          @   35-44           20                  I  10  0393                  148
1110               DCW   @          @  45-54  LABEL     21   WORKAREA       I  10  0403                  148
1111               DCW   @ @         55   NUMBER       22   INDEXREG       I   1  0404                  148
1112               DCW   @          @  56-65  LABEL     23   EORADDR        I  10  0414                  149
1113               DCW   @          @   66-75  LABEL    24   WLRADDR        I  10  0424                  149
1114               DCW   @ @         76   RECORD       25   TOTALS         I   1  0425                  149
1115               DCW   @    @   77-80 HASH           26                  I   4  0429                  149
1116               DCW   @ @         81   STANDARD     27   TYPELABEL      I   1  0430                  149
1117               DCW   @ @         82   NONSTANDARD  28                  I   1  0431                  149
1118               DCW   @ @         83   TM           29                  I   1  0432                  149
1119               DCW   @ @         84   ALL          30   CHECKLABEL     I   1  0433                  150
1120               DCW   @ @         85   IDENT        31                  I   1  0434                  150
1121               DCW   @   @                                               I   3  0437                  150
1122               DCW   @     @                                             I   5  0442                  150
1123               DCW   @          @                                        I  10  0452                  150
1124               DCW   @     @    104-108 NUMBER     35   SERIALNUM      I   5  0457                  150
1125               DCW   @          @ 109-118           39   EX1ADDR        I  10  0467                  150
1126               DCW   @          @ 119-128           40   EX2ADDR        I  10  0477                  151
1127               DCW   @          @ 129-138           41   EX3ADDR        I  10  0487                  151
1128               DCW   @          @ 139-148           42   EX4ADDR        I  10  0497                  151
1129               DCW   @          @ 149-158           43   EX5ADDR        I  10  0507                  152
1130               DCW   @          @ 159-168           44   EX6ADDR        I  10  0517                  152
1131               DCW   @          @ 169-178           45   EX7ADDR        I  10  0527                  152
1132               DCW   @          @ 179-188           46   EX8ADDR        I  10  0537                  153
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1133               DCW   @          @ 189-198           47   VARBUILD       I  10  0547                  153
1134               DCW   @ @          199  UNLOAD       37   REWIND         I   1  0548                  153
1135               DCW   @ @          200  NOREWD       38                  I   1  0549                  153
1136               DCW   @ @           9      201             OVERFLOW       I   1  0550                  153
1137               DCW   @ @          12      202                            I   1  0551                  153
1138               DCW   @   @       203-205  NUMBER          REELSEQ       I   3  0554                  153
1139               DCW   @ @              206                 FORMCTL        I   1  0555                  154
1140               DCW   #9                                                  I   9  0564                  154
1141               DCW   @ @           216     ADDRESS         OVERFLOW       I   1  0565                  154
1142               DCW   @ @                                                 I   1  0566                  154
1143               DCW   @ @                                                 I   1  0567                  154
1144        DTFGM  DCW   @}@                                                 I   1  0568                GMARK  154
1145               EX                                                        I           B 000               155
```

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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1146                JOB   1401 AUTOCODER-PASS 2-ALTER OVERLAY -VERSION 3 I
1147                SFX   I                                            I
1148                ORG   101                                          I          0101
1149         *
1150         *
1151         *             CTL  CARD  ON  TAPE  4
1152         *
1153         PUNCH  CW    GMOVL2                                       I   4  0101  ) 332             158
1154                BSP   1                                            I   5  0105  U %U1 B           158
1155                BSP   1                                            I   5  0110  U %U1 B           158
1156                B     ALTER                                        I   4  0115  B P63             158
1157         OUTCL  MCW   OUTPT&85,LMAINX                              I   7  0119  M I97 086         158
1158                BSS   PREPS2,C                                     I   5  0126  B 662 C           158
1159         NOSOL  SBR   RSOLV&7,NOALTB                               I   7  0131  H 182 Q20         158
1160         *
1161         *             CTL  CARD  FROM  CARDS
1162         *
1163         CRDCL  BCE   LEAVE,MAINX&23,1                             I   8  0138  B 167 024 1       159
1164                MN    MAINX&21,*&8                                 I   7  0146  D 022 160         159
1165                BCE   LEAVE,@456@,                                 I   8  0153  B 167 237         159
1166                CHAIN 2                                            I                       MACRO
1167                BCE                                              I   1  0161  B           GEN   159
1168                BCE                                              I   1  0162  B           GEN   159
1169                B     LETBE                                        I   4  0163  B 171             159
1170         LEAVE  S     SPECL                                        I   4  0167  S 337             159
1171         LETBE  B     NOPCL                                        I   4  0171  B 183             160
1172         RSOLV  B     WRTREC                                       I   4  0175  B 721             160
1173                B     WRTAL                                        I   4  0179  B ?37             160
1174         *
1175         NOPCL  SBR   NPCLX&3                                      I   4  0183  H 204             160
1176                MCW   @N@,ALTS2                                    I   7  0187  M 238 Q67         160
1177                MCW   @N@,ALTS4                                    I   7  0194  M 238 ?82         160
1178         NPCLX  B     0                                            I   4  0201  B 000             160
1179         NOPJB  SBR   NPJBX&3                                      I   4  0205  H 219             161
1180                SW    ALTS1&4,ALTS3&4                              I   7  0209  , Q51 ?66         161
1181         NPJBX  B     0                                            I   4  0216  B 000             161
1182         NOTER  MCW   OUTPT&85,LMAINX                              I   7  0220  M I97 086         161
1183                B     WRTREC                                       I   4  0227  B 721             161
1184         CHUCK  B     NOALTB                                       I   4  0231  B Q20             161
1185                LTORG *                                            I          0235
                    DCW   @456@                                      I   3  0237              LIT   161
                    DCW   @N@                                        I   1  0238              LIT   162
1186                ORG   246                                          I          0246
1187                DA    1X86                                         I      0246  0331
1188         AREASV EQU   *                                            I      0331
1189         GMOVL2 DCW   @)@                                        I   1  0332              GMARK 163
1190                EX                                                 I          B 000             164
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1191                JOB   1401 AUTOCODER - PASS 2 - END OVERLAY -VERSION 3 I
1192                SFX   I                                            I
1193                ORG   341                                          I          0341
1194         OVLY3  MN    @5@,TDF6&4                                   I   7  0341  D 432 768         167
1195                SBR   LONG&3,@N@                                   I   7  0348  H J60 433         167
1196                LCA   186,LMAINX                                   I   7  0355  L 186 086         167
1197                B     NEWWRT                                       I   4  0362  B J35             167
1198                CW    OUTPT&80                                     I   4  0366  ) I92             167
1199                SW    GMOVL4                                       I   4  0370  , 606             167
1200                MCW   GMWMRK,GMOVL4                                I   7  0374  M 773 606         168
1201                B     CTAPE                                        I   4  0381  B S22             168
1202                NOP   TDF9                                         I   4  0385  N 412             168
1203                CW    GMOVL4                                       I   4  0389  ) 606             168
1204                RWD   5                                            I   5  0393  U %U5 R           168
1205                B     CTAPE                                        I   4  0398  B S22             168
1206                NOP   TDFSYS                                       I   4  0402  N 423             168
1207                B     1900                                         I   4  0406  B Z00             169
1208         TDF9   DCW   #3                                           I   3  0412                    169
1209                WTW   5,OVLY4                                      I   8  0413  L %U5 434 W       169
1210         TDFSYS DCW   #3                                           I   3  0423                    169
1211                RTW   1,1650                                       I   8  0424  L %U1 W50 R       169
1212         *
1213                LTORG *                                            I          0432
                    DCW   @5@                                        I   1  0432              LIT   169
                    DCW   @N@                                        I   1  0433              LIT   169
1214         OVLY4  EQU   *&1                                          I      0434
1215                SFX   X                                            X
1216         *    END OF JOB
1217         *
1218                C     CALLTX,BLANKS-2                              X   7  0434  C !73 W14          170
1219                BE    STENDX                                       X   5  0441  B 450 S           170
1220                B     SUREXX                                       X   4  0446  B T08             170
1221         STENDX B     SBROTX                                       X   4  0450  B O33             170
1222                RWD   5                                            X   5  0454  U %U5 R           170
1223                BSP   1                                            X   5  0459  U %U1 B           170
1224                BSP   1                                            X   5  0464  U %U1 B           170
1225                WTM   6                                            X   5  0469  U %U6 M           171
1226                RWD   6                                            X   5  0474  U %U6 R           171
1227                MCW   SYMNMX,MAINX&2                               X   7  0479  M W01 003         171
1228                LCA   LOPUT&1,MAINX&35                             X   7  0486  L I98 036         171
1229                WT    5,MAINX                                      X   8  0493  M %U5 001 W       171
1230                WTM   5                                            X   5  0501  U %U5 M           171
1231                RWD   4                                            X   5  0506  U %U4 R           172
1232                CW    LIPUT&1,MAINX&35                             X   7  0511  ) 187 036         172
1233                CW    100                                          X   4  0518  ) 100             172
1234         BYPASX RT    1,3997                                       X   8  0522  M %U1 I97 R       172
1235                SW    LOPUT&1                                      X   4  0530  , I98             172
1236                BEF   CBSP2X                                       X   5  0534  B 543 K           172
1237                B     BYPASX                                       X   4  0539  B 522             172
1238         CBSP2X RT    1,3997                                       X   8  0543  M %U1 I97 R       173
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1239                SW    LOPUT&1                                      X   4  0551  , I98             173
1240                S     &1,CBSP1X                                    X   7  0555  S 605 604          173
1241                BM    CBSP3X,CBSP1X                                X   8  0562  V 574 604 K        173
1242                B     CBSP2X                                       X   4  0570  B 543             173
1243          *
1244          *  LOAD PASS 3
1245          *
1246          CBSP3X CS    PARTB                                        X   4  0574  / 466             173
1247                CS                                                 X   1  0578  /                  173
1248                CS                                                 X   1  0579  /                  174
1249                B     CTAPE                                        X   4  0580  B W50             174
1250                NOP   TDFEOJ                                       X   4  0584  N 594             174
1251                B     2465                                         X   4  0588  B M65             174
1252          TDFEOJ DCW   CCHALT                                       X   3  0594  Y34               174
1253                RTW   1,2210                                       X   8  0595  L %U1 K10 R        174
1254          CBSP1X DCW   @11@                                        X   2  0604                   174
1255          *
1256                LTORG *                                            X          0605
                    DCW   &1                                           X   1  0605            LIT   175
1257          GMOVL4 DCW   @}@                                         X   1  0606            GMARK 175
1258                EX                                                 X          B 000             176
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1259                JOB   1401 AUTOCODER - PASS 2 - ALTER ASSEMBLY - VERSION 3 X
1260          *
1261          *   AREA DEFINITIONS
1262          *
1263                SFX   B                                            B
1264                ORG   1                                            B          0001
1265                DA    1X86     MAIN                              B     0001 0086                ADDR
1266                EQU   *        LMAIN                             B     0086
1267                ORG   87                                           B          0087
1268                DCW   000      INDEX1                            B   3  0089                  179
1269                DC    00                                         B   2  0091                  179
1270                DCW   000      INDEX2                            B   3  0094                  179
1271                DC    00                                         B   2  0096                  179
1272                DCW   000      INDEX3                            B   3  0099                  179
1273                DC    00                                         B   2  0101                  179
1274                ORG   100                                        B          0100
1275                DC    @}@                                        B   1  0100            GMARK 180
1276                DA    1X86     INPUT                             B     0101 0186
1277                DC    @}@       LIPUT&1                          B   1  0187            GMARK 181
1278                DC    0        ZEROX                             B   1  0188                  181
1279                DC    0        CARDSX                            B   1  0189                  181
1280                DCW   @***@    HLDSBX                            B   3  0192                  181
1281          *
1282          *         INITIALIZATION
1283          *
1284                ORG   101                                        B          0101
1285          VOICE  CS    CALLTX                                     B   4  0101  / !73             182
1286                CS                                                 B   1  0105  /                  182
1287          IOCALT CS    LMAINX                                     B   4  0106  / 086             182
1288                B     CTAPEX                                       B   4  0110  B W50             182
1289                NOP   TDFIO5                                       B   4  0114  N 132             182
1290                BCE   IOCEOF,MAINXX&73,N                           B   8  0118  B 141 074 N        182
1291                B     YOURS                                        B   4  0126  B 541             182
1292          TDFIO5 DCW   &IOCEOF                                     B   3  0132  141               183
1293                RT    5,MAINXX                                     B   8  0133  M %U5 001 R        183
1294          IOCEOF MCW   @1@,HAPPYX&4                               B   7  0141  M 172 N74          183
1295                MCW   @/086@                                       B   4  0148  M 176             183
1296                B     OKAY                                         B   4  0152  B 467             183
1297          STRING CS    LMAINX                                     B   4  0156  / 086             183
1298                B     CTAPEX                                       B   4  0160  B W50             183
1299                NOP   TDFIO5                                       B   4  0164  N 132             184
1300                B     HAPPYX&5                                     B   4  0168  B N75             184
1301                LTORG *                                            B          0172
                    DCW   @1@                                          B   1  0172            LIT   184
                    DCW   @/086@                                       B   4  0176            LIT   184
1302          *
1303          *   PARAMETER TABLE
1304          *
1305                ORG   201                                        B          0201
1306                DA    1X266                                      B     0201 0466
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
1307                     261,266  PARTBB                            B      0466             FIELD
1308         *
1309         *    PROCESS EX
1310         *
1311         OKAY   SBR   SWITCH&3,CMALTB                           B   7  0467  H L04 510          185
1312         EXSET  C     CALLTX,BLANKS-2    Q. ANY CALLS           B   7  0474  C !73 W14         185
1313                BE    PREEM                                     B   5  0481  B 506 S           185
1314         ALTSA  B     SUREXX                                    B   4  0486  B T08             185
1315                B     PREEM                                     B   4  0490  B 506             185
1316         LORGS  C     CALLTX,BLANKS-2    Q. ANY CALLS           B   7  0494  C !73 W14         185
1317                BU    HAULIT                                    B   5  0501  B S64 /           185
1318         PREEM  B     CARDS                                     B   4  0506  B 525             186
1319         *
1320         *     INPUT ROUTINE
1321         *
1322         CMALT  BSS   LSTCD,C            Q.  NO ALTERS          B   5  0510  B 686 C           186
1323                BSS   LSTCD,A            Q. NO MORE ALTERS      B   5  0515  B 686 A           186
1324                CS    LMAINX                                    B   4  0520  / 086             186
1325                R                                               B   1  0524  1                 186
1326         CARDS  SBR   PREEM&3,SBROTX                            B   7  0525  H 509 O33         186
1327                MCW   @SCR@,CHARCR                             B   7  0532  M '15 U62         186
1328                MCW                                           B   1  0539  M                 187
1329                MCW                                           B   1  0540  M                 187
1330         YOURS  C     MAINXX&17,@ALT@                         B   7  0541  C 018 '18         187
1331                BCE   TREAD,MAINXX&5,*                        B   8  0548  B 697 006 *       187
1332                BU    TREAD                                   B   5  0556  B 697 /           187
1333                S     INDEX1&1                                B   4  0561  S 090             187
1334                B     SCANXX                                  B   4  0565  B M19             187
1335                ZA    MAINXX&18&X1,HLDA1#4                    B   7  0569  ? 0/9 '22         188
1336         ALTR4  B     CTAPEX             GET NEXT RECORD      B   4  0576  B W50             188
1337                NOP   TDFRAL                                   B   4  0580  N 922             188
1338                MCW   @R@,OUTPTX&84                           B   7  0584  M '23 I96         188
1339                SW    LOPUTX&1                                B   4  0591  , I98             188
1340                C     OUTPTX&83,HLDA1                         B   7  0595  C I95 '22         188
1341         CALTR  BE    ALTR3              Q. ALTER NUMBER EQUAL TO B   5  0602  B 631 S         188
1342                C     OUTPTX&17,@END@    NUMBER ON ALTER CARD  B   7  0607  C I29 '26         189
1343                BE    ENDST              NO. WRITE TAPE       B   5  0614  B '02 S           189
1344                B     CTAPEX                                  B   4  0619  B W50             189
1345                SFX   X                                       X
1346                NOP   TDF6                                    X   4  0623  N O24             189
1347                SFX   B                                       B
1348                B     ALTR4                                   B   4  0627  B 576             189
1349         ALTR3  BCE   ALTR5,MAINXX&19&X1,,                    B   8  0631  B 651 0S0 ,       189
1350                B     CTAPEX           Q. DELETION            B   4  0639  B W50             189
1351                SFX   X                                       X
1352                NOP   TDF6                                    X   4  0643  N O24             190
1353                SFX   B                                       B
1354                B     SWITCH                                  B   4  0647  B L01             190
1355         ALTR5  B     SCANXX                                  B   4  0651  B M19             190
1356                ZA    MAINXX&18&X1,HLDA1                      B   7  0655  ? 0/9 '22         190
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
1357         ALTR6  C     OUTPTX&83,HLDA1                         B   7  0662  C I95 '22         190
1358                BE    MACRO              DELETE UNTIL SECOND ALTER B   5  0669  B 931 S         190
1359                B     CTAPEX             NUMBER IS REACHED    B   4  0674  B W50             190
1360                NOP   TDFRAL                                   B   4  0678  N 922             191
1361                B     ALTR6                                   B   4  0682  B 662             191
1362         LSTCD  MCW   @N@,CALTR                                B   7  0686  M '27 602         191
1363                B     ALTR4                                   B   4  0693  B 576             191
1364         *
1365         *              MAJOR PROCESSING
1366         *
1367         TREAD  SW    1                                       B   4  0697  , 001             191
1368                SBR   BRNCHX&3,SWITCH                         B   7  0701  H O99 L01         191
1369                BCE   HOMEXX,MAINXX&5,*                       B   8  0708  B O48 006 *       191
1370                C     MAINXX&17,@MLC@                         B   7  0716  C 018 '30         192
1371                BE    HOMEXX                                  B   5  0723  B O48 S           192
1372                C     MAINXX&17,@CHA@                         B   7  0728  C 018 '33         192
1373                BE    CHAINX                                  B   5  0735  B H11 S           192
1374                C     MAINXX&17,@ENT@    Q. ENTER CARD        B   7  0740  C 018 '36         192
1375                BE    ENTST                                   B   5  0747  B 879 S           192
1376         SWMA1  C     MAINXX&17,@MA @    Q. MODIFY ADDRESS MACRO B   7  0752  C 018 '39       193
1377         SWMA2  BE    MASETX                                  B   5  0759  B U33 S           193
1378                C     MAINXX&17,@EX @    Q. EX CARD           B   7  0764  C 018 '42         193
1379                BE    EXSET                                   B   5  0771  B 474 S           193
1380                C     MAINXX&17,@END@    Q. END CARD          B   7  0776  C 018 '26         193
1381                BE    ENDSTX                                  B   5  0783  B U78 S           193
1382                C     MAINXX&18,WHOOPS   Q. CALL STATEMENT    B   7  0788  C 019 W05         194
1383                BE    CALLNX                                  B   5  0795  B J51 S           194
1384                C     MAINXX&19,INCLDX                        B   7  0800  C 020 U59         194
1385                BE    CALLNX                                  B   5  0807  B J51 S           194
1386                C     MAINXX&19,LITORG-1                      B   7  0812  C 020 T57         194
1387                BE    LORGS                                   B   5  0819  B 494 S           194
1388                SBR   INDEX3,TABLEI      Q. GET, PUT, OPEN OR CLOSE B   7  0824  H 099 T74   195
1389         COMIOC C     MAINXX&17,0&X3                          B   7  0831  C 018 070         195
1390                SBR   INDEX3                                  B   4  0838  H 099             195
1391                BE    MSUBTX                                  B   5  0842  B P00 S           195
1392                BCE   OUTIOC,0&X3,#                           B   8  0847  B 859 070 #       195
1393                B     COMIOC                                  B   4  0855  B 831             195
1394         OUTIOC BCE   HOMEXX,MAINXX&19,                       B   8  0859  B O48 020         196
1395                BCE   HOMEXX,MAINXX&15,                       B   8  0867  B O48 016         196
1396                B     MSUBTX             NO, MACRO            B   4  0875  B P00             196
1397         *
1398         *     PROCESS FIXED FORM RECORD
1399         *
1400         ENTST  B     SBROTX                                  B   4  0879  B O33             196
1401                R                                             B   1  0883  1                 196
1402                BCE   ENTST,MAINXX&7,*                        B   8  0884  B 879 008 *       196
1403                C     MAINXX&15,@END@    Q. END CARD          B   7  0892  C 016 '26         197
1404                BE    ENDSTX                                  B   5  0899  B U78 S           197
1405                C     MAINXX&15,@ENT@    Q. NEW MODE          B   7  0904  C 016 '36         197
1406                BU    ENTST                                   B   5  0911  B 879 /           197
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1407                B     PREEM                                           B   4  0916  B 506              197
1408         TDFRAL DCW   000                                             B   3  0922                     197
1409                DCW   @M%U4I12R@                                      B   8  0930                     197
1410         *
1411         *    DELETE ENTIRE MACRO
1412         *
1413         MACRO  BCE   OUTMC,OUTPTX&74,R                               B   8  0931  B 943 I86 R         198
1414                B     SWITCH                                          B   4  0939  B L01               198
1415         OUTMC  B     CTAPEX                                          B   4  0943  B W50               198
1416                NOP   TDFRAL                                          B   4  0947  N 922               198
1417                C     OUTPTX&19,BLANKS                                B   7  0951  C I31 W16          198
1418         MCOUT  BE    OUTMC                                           B   5  0958  B 943 S            198
1419                MCW   @N@,MCOUT                                       B   7  0963  M '27 958          198
1420                BCE   OUTMC,OUTPTX&74,S                               B   8  0970  B 943 I86 S         199
1421                BCE   OUTMC,OUTPTX&74,C                               B   8  0978  B 943 I86 C         199
1422                BSP   4                                               B   5  0986  U %U4 B            199
1423                MCW   OUTMC,MCOUT                                     B   7  0991  M 943 958          199
1424                B     CMALT                                           B   4  0998  B 510              199
1425         *
1426         *   PROCESS END CARD
1427         *
1428         ENDST  MCW   LOPUTX,LMAINX                                   B   7  1002  M I97 086          199
1429                B     ENDSTX                                          B   4  1009  B U78              200
1430                LTORG *                                               B            1013
                    DCW   @SCR@                                           B   3  1015              LIT   200
                    DCW   @ALT@                                           B   3  1018              LIT   200
                HLDA1B DCW   #04                                          B   4  1022              AREA  200
                    DCW   @R@                                             B   1  1023              LIT   200
                    DCW   @END@                                           B   3  1026              LIT   200
                    DCW   @N@                                             B   1  1027              LIT   200
                    DCW   @MLC@                                           B   3  1030              LIT   201
                    DCW   @CHA@                                           B   3  1033              LIT   201
                    DCW   @ENT@                                           B   3  1036              LIT   201
                    DCW   @MA @                                           B   3  1039              LIT   201
                    DCW   @EX @                                           B   3  1042              LIT   201
1431         GM2XXX DCW   @}@                                             B   1  1043              GMARK 201
1432         NUORIG EQU   *&1                                             B      1044
1433                EX                                                    B           B 000              202
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1434                JOB   1401 AUTOCODER - PASS 2 - INITIAL ASSEMBLY VERSION 3 B
1435         *
1436         *       AREA DEFINITION
1437         *
1438                SFX   A                                               A
1439                ORG   1                                               A            0001
1440         MAINXX DA    1X86                                            A      0001  0086                    ADDR
1441                ORG   87                                              A            0087
1442                DCW   @000@                                           A   3  0089                     205
1443                DC    00                                              A   2  0091                     205
1444                DCW   @000@                                           A   3  0094                     205
1445                DC    00                                              A   2  0096                     205
1446                DCW   @000@                                           A   3  0099                     205
1447                DC    00                                              A   2  0101                     205
1448                ORG   101                                             A            0101
1449                DA    1X86          INPUTX                          A      0101  0186
1450         LIPUTX EQU   *                                               A      0186
1451                DC    @}@                                             A   1  0187              GMARK 206
1452         ZEROXX DC    0                                               A   1  0188                     206
1453         CARDSX DC    0                                               A   1  0189                     206
1454         HLDSBX DCW   @***@                                           A   3  0192                     206
1455         *
1456         *    INITIALIZATION
1457         *
1458                ORG   100                                             A            0100
1459                DC    @}@                                             A   1  0100              GMARK 207
1460         START  CS    CALLTX                                          A   4  0101  / !73              207
1461                CS                                                    A   1  0105  /                   207
1462                BCE   *&5,CARDSX,1                                    A   8  0106  B 118 189 1         207
1463                B     RED                                             A   4  0114  B 132              207
1464                MCW   @N@,RHO&1                                       A   7  0118  M 959 764          208
1465                MCW   @N@,TSTEN&5                                     A   7  0125  M 959 780          208
1466         RED    SW    NTPER&4                                         A   4  0132  , 885              208
1467                SW    TSTEN&4                                         A   4  0136  , 779              208
1468                SW    OUTS2&4                                         A   4  0140  , 762              208
1469                BCE   READT,IOCSAV-3,*                                A   8  0144  B 467 H07 *         208
1470                MCW   @N@,SWMA1                                       A   7  0152  M 959 526          209
1471                MCW   @N@,SWMA2                                       A   7  0159  M 959 533          209
1472                B     READT                                           A   4  0166  B 467              209
1473                ORG   201                                             A            0201
1474                DA    1X266                                           A      0201  0466
1475         PARTBX       261,266                                         A      0466              FIELD
1476         *
1477         *   MAJOR PROCESSING
1478         *
1479         READT  B     TWEDB              GET NEXT RECORD              A   4  0467  B 653              210
1480         TREAD  SW    1                                               A   4  0471  , 001              210
1481                SBR   BRNCHX&3,READT                                  A   7  0475  H O99 467          210
1482                BCE   OUTS2,MAINXX&5,*   Q, COMMENTS CARD            A   8  0482  B 758 006 *         210
1483                C     MAINXX&19,@CHAIN@                               A   7  0490  C 020 964          210
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1484                BE    CHAINX                                       A   5  0497  B H11 S           210
1485                C     MAINXX&19,@MLCWA@                            A   7  0502  C 020 969          211
1486                BE    OUTS2                                        A   5  0509  B 758 S           211
1487                C     MAINXX&17,@ENT@     Q. ENTER CARD            A   7  0514  C 018 972          211
1488                BE    ENTST                                        A   5  0521  B 795 S           211
1489          SWMA1 C     MAINXX&19,@MA   @   Q. MODIFY ADDRESS MACRO  A   7  0526  C 020 977          211
1490          SWMA2 BE    MASETX                                       A   5  0533  B U33 S           211
1491                C     MAINXX&19,@EX   @   Q. EX CARD               A   7  0538  C 020 982          212
1492                BE    EXSET                                        A   5  0545  B 857 S           212
1493                C     MAINXX&17,@END@     Q. END CARD              A   7  0550  C 018 985          212
1494                BE    ENDSTX                                       A   5  0557  B U78 S           212
1495                C     MAINXX&18,WHOOPS                             A   7  0562  C 019 W05          212
1496                BE    CALLNX              Q. CALL STATEMENT        A   5  0569  B J51 S           212
1497                C     MAINXX&19,INCLDX                             A   7  0574  C 020 U59          213
1498                BE    CALLNX                                       A   5  0581  B J51 S           213
1499                C     MAINXX&19,@LTORG@                            A   7  0586  C 020 990          213
1500                BE    LORGS               Q. LTORG CARD            A   5  0593  B 918 S           213
1501                SBR   INDEX3,TABLEI                                A   7  0598  H 099 T74          213
1502          FEW   C     MAINXX&17,0&X3                               A   7  0605  C 018 070          213
1503                SBR   INDEX3                                       A   4  0612  H 099              214
1504                BE    MSUBTX                                       A   5  0616  B P00 S           214
1505                BCE   MANY,0&X3,#                                  A   8  0621  B 633 070 #        214
1506                B     FEW                                          A   4  0629  B 605             214
1507          MANY  BCE   OUTS2,MAINXX&19,                             A   8  0633  B 758 020          214
1508                BCE   OUTS2,MAINXX&15,                             A   8  0641  B 758 016          214
1509                B     MSUBTX              NO. MACRO                A   4  0649  B P00             215
1510          *
1511          *     INPUT ROUTINE
1512          *
1513          TWEDB SBR   TWDB1&3                                      A   4  0653  H 696             215
1514                CS    LMAINX                                       A   4  0657  / 086             215
1515                B     RTWED                                        A   4  0661  B 677             215
1516          CHART C                                                  A   1  0665  C                 215
1517                BSS   EOF4,A              Q. LAST CARD             A   5  0666  B 934 A           215
1518                R                                                  A   1  0671  1                 215
1519                SSB   TWDB1,1                                      A   5  0672  K 693 1           216
1520          RTWED B     CTAPEX                                       A   4  0677  B W50             216
1521                NOP   TDF4                                         A   4  0681  N 699             216
1522                BCE   CHANGE,MAINXX&73,N                           A   8  0685  B 708 074 N       216
1523          TWDB1 B     TREAD                                        A   4  0693  B 471             216
1524          TDF4  DCW   &EOF4                                        A   3  0699  934               216
1525                DCW   @M%U5001R@                                   A   8  0707                    216
1526          CHANGE CW   CHART,TSTEN&4                                A   7  0708  ) 665 779         217
1527                MN    @4@,TDF4&4                                   A   7  0715  D 991 703         217
1528                CW    OUTS2&4,NTPER&4                              A   7  0722  ) 762 885         217
1529                C     CALLTX,BLANK                                 A   7  0729  C !73 999          217
1530                BE    HOOHA                                        A   5  0736  B 745 S           217
1531                B     SUREXX                                       A   4  0741  B T08             217
1532          HOOHA MCW   @SCR@,CHARCR                                 A   7  0745  M 994 U62          218
1533                MCW                                                A   1  0752  M                 218
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1534                MCW                                                A   1  0753  M                 218
1535                B     TWDB1                                        A   4  0754  B 693             218
1536          *
1537          *     READ RELEASE
1538          *
1539          OUTS2 BSS   OUTSBX,C                                     A   5  0758  B O41 C           218
1540          RHO   NOP                                                A   1  0763  N                 218
1541                MCW   @8@,RHO                                      A   7  0764  M 995 763          218
1542                B     OUTSBX                                       A   4  0771  B O41             219
1543          *
1544          *    FIXED FORM RECORDS
1545          *
1546          TSTEN BSS   ENTST,C             Q. TAPE INPUT            A   5  0775  B 795 C           219
1547                SRF                       NO. START RAD FEED       A   1  0780  8                 219
1548                SBR   NOSIR&3,ANTST                                A   7  0781  H 917 803          219
1549                MCW   @N@,BUT1XX                                   A   7  0788  M 959 O37          219
1550          ENTST B     SBROTX                                       A   4  0795  B O33             219
1551                B     TWEDB                                        A   4  0799  B 653             219
1552          ANTST MCW   @B@,BUT1XX                                   A   7  0803  M 996 O37          220
1553                SBR   NOSIR&3,TREAD                                A   7  0810  H 917 471          220
1554                BCE   TSTEN,MAINXX&7,*                             A   8  0817  B 775 008 *        220
1555                C     MAINXX&15,@END@     Q. END CARD              A   7  0825  C 016 985          220
1556                BE    ENDSTX                                       A   5  0832  B U78 S           220
1557                C     MAINXX&15,@ENT@     Q. NEW MODE              A   7  0837  C 016 972          221
1558                BU    TSTEN                                        A   5  0844  B 775 /           221
1559                B     SBROTX                                       A   4  0849  B O33             221
1560                B     READT                                        A   4  0853  B 467             221
1561          *
1562          *    PROCESS EX
1563          *
1564          EXSET C     CALLTX,BLANK#3      Q. ANY CALLS             A   7  0857  C !73 999          221
1565                BE    OUTS2                                        A   5  0864  B 758 S           221
1566                B     SUREXX                                       A   4  0869  B T08             221
1567                B     SBROTX                                       A   4  0873  B O33             222
1568                B     READT                                        A   4  0877  B 467             222
1569          *
1570          *    READ RELEASE REDUNDANCY ROUTINE
1571          *
1572          NTPER BSS   YESIR,C             Q. TAPE INPUT            A   5  0881  B 896 C           222
1573                R                                                  A   1  0886  1                 222
1574                SS    1                                            A   2  0887  K 1               222
1575                MCW   @N@,RHO                                      A   7  0889  M 959 763          222
1576          YESIR SBR   COMETS&3,CRWRED                              A   7  0896  H X65 X71         222
1577                SBR   CCONPR&3,NOSIR                               A   7  0903  H X70 914         223
1578                B     CRWRED                                       A   4  0910  B X71             223
1579          NOSIR B     TREAD                                        A   4  0914  B 471             223
1580          *
1581          *     PROCESS LTORG
1582          *
1583          LORGS C     CALLTX,BLANK        Q. ANY CALLLS            A   7  0918  C !73 999          223
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1584                BU    HAULIT                                           A  5  0925  B S64 /            223
1585                B     OUTS2                                            A  4  0930  B 758              223
1586         EOF4   CS    LMAINX                                           A  4  0934  / 086              223
1587                SW    1                                                A  4  0938  , 001              224
1588                MCW   @END$$$@,MAINXX&18                               A  7  0942  M '05 019           224
1589                B     ENDSTX                                           A  4  0949  B U78              224
1590         ANTPER DCW   &NTPERA                                          A  3  0955  881                224
1591         ACRWED DCW   &CRWRED                                          A  3  0958  X71                224
1592                LTORG *                                               A          0959
                    DCW   @N@                                             A  1  0959             LIT    224
                    DCW   @CHAIN@                                         A  5  0964             LIT    224
                    DCW   @MLCWA@                                         A  5  0969             LIT    225
                    DCW   @ENT@                                           A  3  0972             LIT    225
                    DCW   @MA   @                                         A  5  0977             LIT    225
                    DCW   @EX   @                                         A  5  0982             LIT    225
                    DCW   @END@                                           A  3  0985             LIT    225
                    DCW   @LTORG@                                         A  5  0990             LIT    225
                    DCW   @4@                                             A  1  0991             LIT    225
                    DCW   @SCR@                                           A  3  0994             LIT    226
                    DCW   @8@                                             A  1  0995             LIT    226
                    DCW   @B@                                             A  1  0996             LIT    226
         BLANKA DCW   #03                                                 A  3  0999             AREA   226
                    DCW   @END$$$@                                        A  6  1005             LIT    226
1593         *
1594         *   MAIN LINE PROCESSING ANNEX
1595         *
1596                SFX   X                                               X
1597                ORG   NUORIG                                          X          1044
1598         EOF1B  RWD   1                                               X  5  1044  U %U1 R            227
1599                S     PREVS                                          X  4  1049  S H72              227
1600                B     SWITCH                                         X  4  1053  B L01              227
1601         *
1602         *   PROCESS LOZENGED FIELD  6 - 20
1603         *
1604         LOZENG BM    MLBLZ,MAINX&2&X1   Q. INTERNAL LEVEL           X  8  1057  V D68 0'3 K        227
1605                B     LABEL                                          X  4  1065  B /19              227
1606                MCW   BLANKS,MAINX&4&X1                              X  7  1069  M W16 0'5          227
1607                MCW   INDEX1,SAVX1#3                                X  7  1076  M 089 W11          227
1608                MCW   INDEX3,INDEX2                                  X  7  1083  M 099 094          228
1609                B     SBGRD                                          X  4  1090  B G46              228
1610                A     SAVX1,INDEX1                                   X  7  1094  A W11 089          228
1611                MCW   0&X3,MAINX&X1                                  X  7  1101  M 0?0 0'1          228
1612                MCW   SAVX1,INDEX1                                   X  7  1108  M W11 089          228
1613                B     UPENGL                                         X  4  1115  B A48              228
1614         *
1615         *   LOCATE PARAMETERS
1616         *
1617         LABEL  SBR   LEXIT&3                                         X  4  1119  H S63              229
1618                MCW   BLANKS#5,INDEX3                                X  7  1123  M W16 099          229
1619                MCW   BLANKS,CNTP                                    X  7  1130  M W16 W19          229
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1620                MN    MAINX&1&X1,CNTP                                  X  7  1137  D 0'2 W19          229
1621         CIRCL  S     &1,CNTP                                          X  7  1144  S W17 W19          229
1622                BM    TENSR,CNTP                                       X  8  1151  V /70 W19 K        230
1623                A     @3@,INDEX3                                       X  7  1159  A W18 099          230
1624                B     CIRCL                                            X  4  1166  B /44              230
1625         TENSR  BCE   CHZON,DECTB-2&X3,0                               X  8  1170  B !74 UI0 0        230
1626                MCW   BLANKS,CNTP#1                                    X  7  1178  M W16 W19          230
1627                MCW   DECTB&X3,INDEX3                                  X  7  1185  M UI2 099          231
1628                MN    MAINX&2&X1,CNTP                                  X  7  1192  D 0'3 W19          231
1629         MOVINP S     &1,CNTP                                          X  7  1199  S W17 W19          231
1630                MCW   0&X3,0&X3                                        X  7  1206  M 0?0 0?0          231
1631                SAR   WAREA#3                                          X  4  1213  Q W22              231
1632                BCE   CHZON,0&X3,,       Q. MISSING PARAMETER          X  8  1217  B !74 0?0 ,        232
1633                BM    PUTIN,CNTP         Q. PARAMETER LOCATED          X  8  1225  V S44 W19 K       232
1634                MCW   WAREA,INDEX3                                     X  7  1233  M W22 099          232
1635                B     MOVINP                                           X  4  1240  B /99              232
1636         PUTIN  BCE   CHZON,0&X3,;                                     X  8  1244  B !74 0?0 ;        232
1637                BWZ   DELET,MAINX&2&X1,S                               X  8  1252  V D41 0'3 S        233
1638         LEXIT  B     0                                                X  4  1260  B 000              233
1639         *
1640         *    PROCESS LTORG
1641         *
1642         HAULIT MCW   @ORG  @,MAINX&19   REPLACE LTORG WITH ORG        X  7  1264  M W27 020          233
1643                MCW   @L@,MAINX&74                                     X  7  1271  M W28 075          233
1644                B     SBROT                                            X  4  1278  B O33              233
1645                B     EXITC                                            X  4  1282  B D79              233
1646                CS    LMAIN                                            X  4  1286  / 086              233
1647                MCW   LITORG,MAINX&20    GENERATE LTORG*               X  7  1290  M T58 021          234
1648                MCW   CHARCC,MAINX&74                                  X  7  1297  M U61 075          234
1649                B     WHYYY                                            X  4  1304  B K97              234
1650         *
1651         *              PREPARATION FOR LTORG,EX,EX OR IOCS
1652         *
1653         SUREX  SBR   SIMPLE&3                                         X  4  1308  H T41              234
1654                SW    1                                                X  4  1312  , 001              234
1655                CS    LIPUTX                                           X  4  1316  / 186              234
1656                LCA   LMAINX,LIPUTX                                    X  7  1320  L 086 186          234
1657                B     EXITCX                                           X  4  1327  B D79              235
1658                LCA   LIPUTX,LMAINX                                    X  7  1331  L 186 086          235
1659         SIMPLE B     0                                                X  4  1338  B 000              235
1660         TDFEXT DCW   &RWDEXT                                          X  3  1344  D83                235
1661                DCW   @M%U1001R@                                       X  8  1352                     235
1662         LITORG DCW   @LTORG*@                                         X  6  1358                     235
1663         *
1664         *   IOCS TABLE
1665         *
1666                DCW   @#@                                             X  1  1359                     235
1667                DCW   @RLS@                                           X  3  1362                     236
1668                DCW   @GET@                                           X  3  1365                     236
1669                DCW   @PUT@                                           X  3  1368                     236
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1670                DCW   @DTF@                                     X   3  1371                    236
1671         TABLEI DCW   @OPE@                                     X   3  1374                    236
1672         *
1673         *  GENERATE UNKNOWN MACRO CARD
1674         *
1675         NOROT  SBR   NROTC&3                                   X   4  1375  H U14              236
1676                CS    LMAINX                                    X   4  1379  / 086              236
1677                MCW   @B@,MAINX&85                              X   7  1383  M W29 086           237
1678                MCW   @UNKNOWN@,MAINX&19                        X   7  1390  M W36 020           237
1679                MCW   CHARCC,MAINX&74                           X   7  1397  M U61 075           237
1680                MCW   @*@,MAINX&5                               X   7  1404  M W37 006           237
1681         NROTC  B     0                                         X   4  1411  B 000              237
1682         POTS   MCW   @B@,SWITCH                                X   7  1415  M W29 L01           237
1683                MCW   @N@,NEXTCD                                X   7  1422  M W38 N66           238
1684                B     COOKER                                    X   4  1429  B E90              238
1685         *
1686         *   MODIFY ADDRESS MACRO
1687         *
1688         MASET  MCW   CHARCR,MAINX&74                           X   7  1433  M U62 075           238
1689                B     SBROTX                                    X   4  1440  B O33              238
1690                MCW   @D@,MAINX&17                              X   7  1444  M W39 018           238
1691                B     SGC                                       X   4  1451  B P18              238
1692         INCLDX DCW   @INCLD@                                   X   5  1459                    238
1693         CHARCS DCW   @Z@                                       X   1  1460                    239
1694         CHARCC DCW   @Y@                                       X   1  1461                    239
1695         CHARCR DCW   @W@                                       X   1  1462                    239
1696         KINGS  B     NOROT                                     X   4  1463  B T75              239
1697                MCW   HLDSB,MAINX&10                            X   7  1467  M 192 011           239
1698                B     WHYYY                                     X   4  1474  B K97              239
1699         ENDSTX B     CTAPE                                     X   4  1478  B W50              239
1700                NOP   TDF5                                      X   4  1482  N V89              240
1701                B     OVLY4I                                    X   4  1486  B 434              240
1702         DECTB  DCW   &PARTB                                    X   3  1492  466                240
1703                DA    9X3                                       X      1493   1519
1704         ENDDC  EQU   *                                         X      1519
1705         MOVEC  LCA   @;@,0&X3  ??? BLANK OR GROUP MARK ???     X   7  1520  L W40 0?0           241
1706                SBR   INDEX3                                    X   4  1527  H 099              241
1707                A     @3@,INDEX2&1                              X   7  1531  A W18 095           242
1708                BCE   MIDLE,INDEX2&1,3                          X   8  1538  B H22 095 3         242
1709         LOWER  A     @1@,INDEX1                                X   7  1546  A W41 089           242
1710                SW    MAINX&20&X1                               X   4  1553  , 0S1              242
1711                BCE   MOVEC,MAINX&20&X1,,                       X   8  1557  B V20 0S1 ,         242
1712         WEEDD  MCW   INDEX2&1,IOCSAV                           X   7  1565  M 095 H10           243
1713                B     WEEDBX                                    X   4  1572  B N39              243
1714                MCW   IOCSAV,INDEX2&1                           X   7  1576  M H10 095           243
1715                B     COMSN                                     X   4  1583  B P79              243
1716         TDF5   DCW   #3                                        X   3  1589                    243
1717                RTW   5,OVLY4I                                  X   8  1590  L %U5 434 R         243
1718         NEWEST DC    0                                         X   1  1598                    243
1719         SYMNM  DCW   @000@                                     X   3  1601                    243
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1720         WHOOPS DCW   @CALL@                                    X   4  1605                    244
1721         ADDCAL DCW   &CALLTX                                   X   3  1608  !73                244
1722                LTORG *                                        X          1609
             SAVX1X DCW   #03                                       X   3  1611              AREA  244
             BLANKS DCW   #05                                       X   5  1616              AREA  244
                    DCW   &1                                        X   1  1617              LIT   244
                    DCW   @3@                                       X   1  1618              LIT   244
             CNTPX  DCW   #01                                       X   1  1619              AREA  244
             WAREAX DCW   #03                                       X   3  1622              AREA  245
                    DCW   @ORG  @                                   X   5  1627              LIT   245
                    DCW   @L@                                       X   1  1628              LIT   245
                    DCW   @B@                                       X   1  1629              LIT   245
                    DCW   @UNKNOWN@                                 X   7  1636              LIT   245
                    DCW   @*@                                       X   1  1637              LIT   245
                    DCW   @N@                                       X   1  1638              LIT   245
                    DCW   @D@                                       X   1  1639              LIT   246
                    DCW   @;@                                       X   1  1640              LIT   246
                    DCW   @1@                                       X   1  1641              LIT   246
1723                ORG   1649                                     X          1649
1724         GM1    DCW   @)@                                       X   1  1649              GMARK 247
1725                EX                                             X          B 000             248
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1726                JOB   1401 AUTOCODER - PASS 2 - MACRO-GENERATOR- VERSION 3 X
1727                SFX   X                                                 X
1728          *
1729          *   GENERALIZED TAPE INPUT/OUTPUT ROUTINE
1730          *
1731                ORG   1650                                              X          1650
1732          CTAPEX SBR  INDEX2                                            X  4  1650  H 094              251
1733                SBR   CCONPR&3                                          X  4  1654  H X70              251
1734                MCW   3&X2,INDEX2                                       X  7  1658  M 0!3 094          251
1735                MCW   8&X2,CTAPEC&7                                     X  7  1665  M 0!8 X29          251
1736                MCW   0&X2,CEORC&3                                      X  7  1672  M 0!0 X41          251
1737                SW    CCOMPR&4                                          X  4  1679  , X47              251
1738                MCW   7&X2,CCOMPR&6                                     X  7  1683  M 0!7 X49          252
1739                A     @12@,CCOMPR&6                                     X  7  1690  A Y93 X49          252
1740                CW    CCOMPR&4                                          X  4  1697  ) X47              252
1741                MN    CTAPEC&3,CHALT&6                                  X  7  1701  D X25 Y55          252
1742                MN    CTAPEC&7,CHALT&6                                  X  7  1708  D X29 Y55          252
1743                MCW   @9@,CERRCT#1                                      X  7  1715  M Y94 Y95          252
1744          CTAPEC RT   0,0                                               X  8  1722  M %U0 000 R        253
1745                BCE   COMETS,CTAPEC&7,W                                 X  8  1730  B X62 X29 W       253
1746          CEORC  BEF  0                                                 X  5  1738  B 000 K           253
1747          CCOMPR BCE  CTAPEC,0,}                                        X  8  1743  B X22 000 } GMARK  253
1748                B                                                       X  1  1751  B                253
1749                B                                                       X  1  1752  B                253
1750                B                                                       X  1  1753  B                253
1751                B                                                       X  1  1754  B                254
1752                B                                                       X  1  1755  B                254
1753                B                                                       X  1  1756  B                254
1754                B                                                       X  1  1757  B                254
1755                B                                                       X  1  1758  B                254
1756                B                                                       X  1  1759  B                254
1757                B                                                       X  1  1760  B                254
1758                B                                                       X  1  1761  B                255
1759          COMETS BER  CRWRED                                            X  5  1762  B X71 L           255
1760          CCONPR B    0                                                 X  4  1767  B 000              255
1761          CRWRED S    @1@,CERRCT                                        X  7  1771  S Y96 Y95          255
1762                MN    CTAPEC&3,*&4                                      X  7  1778  D X25 X88          255
1763                BSP   0                                                 X  5  1785  U %U0 B            255
1764                BCE   CTROW,CTAPEC&7,W                                  X  8  1790  B Y10 X29 W       255
1765                BM    CHALT,CERRCT                                      X  8  1798  V Y49 Y95 K       256
1766                B     CTAPEC                                            X  4  1806  B X22             256
1767          CTROW  A    @1@,CERASC#2                                      X  7  1810  A Y96 Y98          256
1768                SKP   6                                                 X  5  1817  U %U6 E           256
1769                BCE   CCHALT,CERASC-1,5                                 X  8  1822  B Y34 Y97 5       256
1770                B     CTAPEC-7                                          X  4  1830  B X15             256
1771          CCHALT S    CERASC                                            X  4  1834  S Y98             257
1772                H     0,202                                             X  7  1838  . 000 202         257
1773                B     CTAPEC-7                                          X  4  1845  B X15             257
1774          CHALT  H    0,200                                             X  7  1849  . 000 200         257
1775                BSS   CTAPEC-7,E                                        X  5  1856  B X15 E           257
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1776                MCW   CTAPEC&7,*&8                                     X  7  1861  M X29 Y75          257
1777                RT    0,0                                               X  8  1868  M %U0 000 R       258
1778                H     0,201                                             X  7  1876  . 000 201         258
1779                B     CCONPR                                            X  4  1883  B X67             258
1780          HEADR  DCW  @HEADR@                                           X  5  1891                  258
1781                LTORG *                                                 X          1892
                    DCW   @12@                                              X  2  1893           LIT    258
                    DCW   @9@                                               X  1  1894           LIT    258
              CERRCT DCW  #01                                               X  1  1895           AREA   258
                    DCW   @1@                                               X  1  1896           LIT    259
              CERASC DCW  #02                                               X  2  1898           AREA   259
1782          *
1783          *   INITIALIZATION
1784          *
1785                ORG   1900                                              X          1900
1786          STARTX MCW  340,IOCSAV                                        X  7  1900  M 340 H10          260
1787                MCW                                                     X  1  1907  M                260
1788                MCW   NORDRL,HOLE#1                                     X  7  1908  M W12 !55          260
1789                B     CTAPE                                             X  4  1915  B W50             260
1790                NOP   TDFSS                                             X  4  1919  N Z68             260
1791                CW    GM1                                               X  4  1923  ) W49             260
1792                SW    3998                                              X  4  1927  , I98             260
1793                MCW   LIPUT&1,3998                                      X  7  1931  M 187 I98          261
1794                CW    3995,3997                                         X  7  1938  ) I95 I97          261
1795                BSS   ALTERX,B                                          X  5  1945  B Z77 B            261
1796                RWD   1                                                 X  5  1950  U %U1 R           261
1797                MCW   HOLE,CARDSX                                       X  7  1955  M !55 189         261
1798                B     STARTA                                            X  4  1962  B 101             261
1799          TDFSS  DCW  &CCHALT                                           X  3  1968  Y34               261
1800                DCW   @L%U1001R@                                        X  8  1976                   262
1801          ALTERX B    CTAPEX                                            X  4  1977  B W50             262
1802                NOP   TDFSS                                             X  4  1981  N Z68             262
1803                CW    GM2XXX                                            X  4  1985  ) '43             262
1804                RWD   1                                                 X  5  1989  U %U1 R           262
1805                MCW   IOCSAV,SYMNM                                      X  7  1994  M H10 W01         262
1806                MCW   &IOCALT,SWITCH&3                                  X  7  2001  M !58 L04         262
1807                SBR   HAPPY&3,STRING                                    X  7  2008  H N73 156         263
1808                MCW   @N@,OUTSB                                        X  7  2015  M !59 O41         263
1809                MCW   @N@,BUT1X                                        X  7  2022  M !59 O37         263
1810                MCW   @N@,BUT2X                                        X  7  2029  M !59 O89         263
1811                BCE   VOICEB,IOCSAV-3,*                                 X  8  2036  B 101 H07 *       263
1812                MCW   @N@,SWMA2B                                        X  7  2044  M !59 759         264
1813                B     VOICEB                                            X  4  2051  B 101             264
1814                LTORG *                                                 X          2055
              HOLEX  DCW  #01                                               X  1  2055           AREA   264
                    DCW   &IOCALT                                           X  3  2058  106      ADCON  264
                    DCW   @N@                                               X  1  2059           LIT    264
1815                ORG   1900                                              X          1900
1816                DA    1X174                                             X      1900   2073
1817          CALLT  EQU  *                                                 X      2073
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1818         *
1819         *  PROCESS MISSING PARAMETERS WITH REGARD TO ZONE
1820         *
1821         CHZON  BWZ   SLASH,MAINX&2&X1,S                           X   8  2074  V J08 0'3 S        265
1822                BWZ   DELET,MAINX&2&X1,B                           X   8  2082  V D41 0'3 B        265
1823                MCW   @B@,MAINX&85                                 X   7  2090  M H44 086         265
1824         ZONBR  CW    MAINX&X1,MAINX&3&X1                        X   7  2097  ) 0'1 0'4         265
1825         ZONCH  B     DEFND                                      X   4  2104  B ?41             265
1826         SLASH  MCW   BLANKS-2,MAINX&2&X1                        X   7  2108  M W14 0'3         266
1827                B     ZONBR                                      X   4  2115  B !97             266
1828         SUBSET MCW   @N@,SWITCH                                 X   7  2119  M H45 L01         266
1829                MCW   @B@,NEXTCD                                 X   7  2126  M H44 N66         266
1830                MCW   CHARCS,MAINX&74                            X   7  2133  M U60 075         266
1831                B     CALIT                                      X   4  2140  B J58             266
1832         MASKS  MCW   @B@,NOCAL                                  X   7  2144  M H44 K20         267
1833         *
1834         *  PROCESSING CALL STATEMENT
1835         *
1836         CALLN  MCW   CHARCR,MAINX&74                            X   7  2151  M U62 075         267
1837         CALIT  MCW   ADDCAL,INDEX2      BEGIN SCAN OF CALL TABLE X   7  2158  M W08 094         267
1838                SW    MAINXX&20                                  X   4  2165  , 021             267
1839         YSCALX BCE   XXXX,INDEX2-2,Y    Q. CALL TABLE EXCEEDED  X   8  2169  B K90 092 Y       267
1840                C     0&X2,@   @                                 X   7  2177  C 0!0 H48         268
1841                BE    SPADEX                                     X   5  2184  B K09 S           268
1842                C     0&X2,MAINX&22                              X   7  2189  C 0!0 023         268
1843                SAR   INDEX2                                     X   4  2196  Q 094             268
1844                BE    QUEEN                                      X   5  2200  B K16 S           268
1845                B     YSCALX                                     X   4  2205  B J69             268
1846         SPADEX MCW   MAINX&22,0&X2                              X   7  2209  M 023 0!0         268
1847         QUEEN  CW    MAINXX&20                                  X   4  2216  ) 021             269
1848         NOCALX NOP   SKELCX                                     X   4  2220  N R17             269
1849                B     SBROT                                      X   4  2224  B O33             269
1850                BCE   SWITCH,MAINX&19,D  Q. INCLD STATEMENT      X   8  2228  B L01 020 D       269
1851         *
1852         *   LOAD PARAMETES INTO TABLE
1853         *
1854                MCW   MAINX&10,PARTB                             X   7  2236  M 011 466         269
1855                SBR   INDEX3                                     X   4  2243  H 099             269
1856                S     INDEX1&1                                   X   4  2247  S 090             269
1857         DIMNDX B     SCANXX                                     X   4  2251  B M19             270
1858                SW    1                                          X   4  2255  , 001             270
1859                LCA   MAINX&18&X1,0&X3                           X   7  2259  L 0/9 0?0         270
1860                SBR   INDEX3                                     X   4  2266  H 099             270
1861                BCE   HEARTX,MAINX&19&X1,                       X   8  2270  B L09 0S0         270
1862                BCE   WEEDBX,MAINX&19&X1,,                      X   8  2278  B N39 0S0 ,       270
1863                B     DIMNDX                                     X   4  2286  B K51             270
1864         XXXX   MCW   @7@,MAINX&85                              X   7  2290  M H49 086         271
1865         WHYYY  B     SBROT                                      X   4  2297  B O33             271
1866         SWITCH B     READTA                                     X   4  2301  B 467             271
1867                B     POTS                                       X   4  2305  B U15             271
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1868         *
1869         *   GENERATE BRANCH AND DCW,S
1870         *
1871         HEARTX LCA   @ @,0&X3                                   X   7  2309  L H50 0?0         271
1872                CS    LMAINX                                     X   4  2316  / 086             271
1873                MCW   PARTB,MAINX&10                             X   7  2320  M 466 011         271
1874                MCW   PARTB-6,MAINX&24                           X   7  2327  M 460 025         272
1875                SAR   INDEX3                                     X   4  2334  Q 099             272
1876                MCW   @B@,MAINX&15                              X   7  2338  M H44 016         272
1877         SLAM   MCW   CHARCC,MAINX&74                           X   7  2345  M U61 075         272
1878                MCW   INDEX3,SAVXL2#3                           X   7  2352  M 099 H53         272
1879                MCW   SAVXL2,INDEX3                             X   7  2359  M H53 099         272
1880                CW    MAINX&23                                   X   4  2366  ) 024             273
1881                B     SBROT                                      X   4  2370  B O33             273
1882                CS    LMAINX                                     X   4  2374  / 086             273
1883                BCE   SWITCH,0&X3,                              X   8  2378  B L01 0?0         273
1884                MCW   @DCW@,MAINX&17                           X   7  2386  M H56 018         273
1885                MCW   INDEX3,INDEX2                            X   7  2393  M 099 094         273
1886                B     SBGRDX                                     X   4  2400  B G46             273
1887                MCW   0&X3,MAINX&20&X1                          X   7  2404  M 0?0 0S1         274
1888                SAR   INDEX3                                     X   4  2411  Q 099             274
1889                B     SLAM                                       X   4  2415  B L45             274
1890         *
1891         *     SCAN FOR COMMA, TWO BLANKS, OR AN @
1892         *
1893         SCANXX SBR   CLUBS&3                                    X   4  2419  H N12             274
1894         SCANL  SW    MAINX&20                                   X   4  2423  , 021             274
1895                BCE   SCNAT,MAINX&20&X1,@                        X   8  2427  B N13 0S1 @       274
1896                BCE   CETWMS,MAINX&20&X1,,                       X   8  2435  B M98 0S1 ,       274
1897                C     MAINX&20&X1,@  @                           X   7  2443  C 0S1 H58         275
1898                BE    CLUBS                                      X   5  2450  B N09 S           275
1899         CXIT1  A     @1@,INDEX1                                 X   7  2455  A H59 089         275
1900                C     INDEX1,@52@                                X   7  2462  C 089 H61         275
1901                BU    SCANL                                      X   5  2469  B M23 /           275
1902                C     MAINX&71,@  @                              X   7  2474  C 072 H58         275
1903                BE    CLUBS                                      X   5  2481  B N09 S           276
1904                BCE   CLUBS,MAINX&71,                            X   8  2486  B N09 072         276
1905                B     CXIT                                       X   4  2494  B N02             276
1906         CETWMS SW    MAINX&21&X1                                X   4  2498  , 0S2             276
1907         CXIT   A     @1@,INDEX1                                 X   7  2502  A H59 089         276
1908         CLUBS  B     0                                          X   4  2509  B 000             276
1909         SCNAT  ZA    @510@,INDEX1&1                             X   7  2513  ? H64 090         276
1910         ATLOK  BCE   CXIT1,MAINX&20&X1,@                        X   8  2520  B M55 0S1 @       277
1911                S     &10,INDEX1&1                               X   7  2528  S H66 090         277
1912                B     ATLOK                                      X   4  2535  B N20             277
1913         *
1914         *  OBTAIN MORE PARAMETERS FROM ADDITIONAL RECORDS
1915         *
1916         WEEDBX SBR   WEDXT&3                                    X   4  2539  H O21             277
1917                B     NEWEED                                     X   4  2543  B N54             277
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1918         WEDDBX A     @1@,INDEX1                                   X  7  2547  A H59 089          277
1919         NEWEED C     INDEX1,@52@                                  X  7  2554  C 089 H61          278
1920                BU    LOOPW                                        X  5  2561  B O06 /            278
1921         NEXTCD NOP   CALLCD                                       X  4  2566  N G80              278
1922         HAPPY  B     TWEDBA            READ NEXT RECORD           X  4  2570  B 653              278
1923                NOP                                               X  1  2574  N                  278
1924                MCW   CHARCR,MAINX&74                             X  7  2575  M U62 075          278
1925         THRU   B     SBROTX                                       X  4  2582  B O33              278
1926                BCE   HAPPY,MAINX&5,*                            X  8  2586  B N70 006 *        279
1927                S     INDEX1&1                                     X  4  2594  S 090              279
1928                BCE   MOVEC,MAINX&20,,   Q. FIRST PARAMETER MISSING X  8  2598  B V20 021 ,      279
1929         LOOPW  BCE   WEDDBX,MAINX&20&X1,                          X  8  2606  B N47 0S1          279
1930                SW    MAINX&20&X1                                  X  4  2614  , 0S1             279
1931         WEDXT  B     0                                            X  4  2618  B 000              279
1932         TDF6   DCW   &CCHALT                                      X  3  2624  Y34                279
1933                DCW   @M%U6I12W@                                  X  8  2632                     280
1934         *
1935         *   OUTPUT ROUTINE
1936         *
1937         SBROTX SBR   BRNCH&3                                      X  4  2633  H O99              280
1938         BUT1X  B     HOMEX                                        X  4  2637  B O48              280
1939         OUTSB  MCW   ANTPER,COMETS&3                              X  7  2641  M 955 X65          280
1940         HOMEX  MCW   LMAIN,LOPUT                                 X  7  2648  M 086 I97          280
1941                BCE   BUT2X,OUTPT&73,*                            X  8  2655  B O89 I85 *        280
1942                MCW   BLANKS-3,OUTPT&73                           X  7  2663  M W13 I85          281
1943                SW    LOPUT&1                                      X  4  2670  , I98              281
1944                MCW   LIPUT&1,LOPUT&1                            X  7  2674  M 187 I98          281
1945                B     CTAPEX                                       X  4  2681  B W50              281
1946                NOP   TDF6                                        X  4  2685  N O24              281
1947         BUT2X  MCW   ACRWED,COMETS&3                              X  7  2689  M 958 X65          281
1948         BRNCH  B     0                                            X  4  2696  B 000              281
1949         *
1950         *  PROCESS PARAMETERS FOR SUBSTITUTION
1951         *
1952         MSUBTX MCW   @R@,MAINX&74                                 X  7  2700  M H67 075          282
1953                B     SBROTX                                       X  4  2707  B O33              282
1954                A     @1@,SYMNM                                    X  7  2711  A H59 W01          282
1955         SGC    MCW   MAINX&17,HLDSB                              X  7  2718  M 018 192          282
1956                S     ENDDC                                        X  4  2725  S V19              282
1957                CHAIN 8                                           X                    MACRO
1958                S                                                 X  1  2729  S                GEN  282
1959                S                                                 X  1  2730  S                GEN  282
1960                S                                                 X  1  2731  S                GEN  283
1961                S                                                 X  1  2732  S                GEN  283
1962                S                                                 X  1  2733  S                GEN  283
1963                S                                                 X  1  2734  S                GEN  283
1964                S                                                 X  1  2735  S                GEN  283
1965                S                                                 X  1  2736  S                GEN  283
1966                S     INDEX2&2                                    X  4  2737  S 096              283
1967                A     @3@,INDEX2&1                                X  7  2741  A H68 095          284
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1968                MCW   MAINX&10,PARTB                              X  7  2748  M 011 466          284
1969                SBR   INDEX3                                     X  4  2755  H 099              284
1970                S     INDEX1&1                                    X  4  2759  S 090              284
1971                BCE   BTREND,MAINX&20,                           X  8  2763  B Q25 021          284
1972                BCE   MOVEC,MAINX&20,,                           X  8  2771  B V20 021 ,        284
1973         COMSN  A     @3@,INDEX2&1                                X  7  2779  A H68 095          285
1974                BCE   ABOVE,INDEX2&1,3                           X  8  2786  B H33 095 3        285
1975         BELOW  B     SCANXX                                      X  4  2794  B M19              285
1976                LCA   MAINX&18&X1,0&X3                           X  7  2798  L 0/9 07O          285
1977                SBR   INDEX3                                     X  4  2805  H 099              285
1978                BCE   MOVEC,MAINX&20&X1,,                       X  8  2809  B V20 0S1 ,        285
1979                BCE   WEEDD,MAINX&19&X1,,                       X  8  2817  B V65 0S0 ,        286
1980         BTREND LCA   @,@,0&X3                                    X  7  2825  L H69 07O          286
1981                CS    LMAINX                                      X  4  2832  / 086              286
1982                C     PREVS#3,HLDSB                               X  7  2836  C H72 192          286
1983                MCW   @999@,PREVS                                 X  7  2843  M H75 H72          286
1984                BE    HARMN                                       X  5  2850  B R65 S            286
1985                BH    RDTP1                                       X  5  2855  B Q65 U            287
1986         EOF1   RWD   1                                           X  5  2860  U %U1 R            287
1987         *
1988         *              SUBSTITUTIONS
1989         *
1990         RDTP1  SW    100                                         X  4  2865  , 100              287
1991                B     CTAPE                                       X  4  2869  B W50              287
1992                NOP   TDFLIB                                      X  4  2873  N B18              287
1993                C     MAINX&19,HEADR                              X  7  2877  C 020 Y91          287
1994                BU    RDTP1                                       X  5  2884  B Q65 /            287
1995                C     MAINX&7,@999@                               X  7  2889  C 008 H75          288
1996                BE    KINGS                                       X  5  2896  B U63 S            288
1997                C     MAINX&7,HLDSB                               X  7  2901  C 008 192          288
1998                BU    RDTP1                                       X  5  2908  B Q65 /            288
1999                B     HARMN                                       X  4  2913  B R65              288
2000         SKELC  MCW   @N@,NOCAL                                   X  7  2917  M H45 K20          288
2001                MCW   CHARCS,MAINX&74                            X  7  2924  M U60 075          289
2002                B     SBROT                                       X  4  2931  B O33              289
2003                BCE   HARMN,MAINX&19,D                           X  8  2935  B R65 020 D        289
2004                MCW   @B    @,MAINX&19                          X  7  2943  M H80 020          289
2005         BOUTS  CW    ZEROX                                       X  4  2950  ) 188              289
2006                MCW   CHARCC,MAINX&74                            X  7  2954  M U61 075          289
2007                B     SBROTX                                      X  4  2961  B O33              290
2008         HARMN  CS    LMAINX                                      X  4  2965  / 086              290
2009                SW    1,100                                       X  7  2969  , 001 100          290
2010                MCW   LIPUT&1,100                                 X  7  2976  M 187 100          290
2011                B     CTAPEX                                      X  4  2983  B W50              290
2012                NOP   TDFLB2                                     X  4  2987  N B29              290
2013                C     MAINX&19,HEADR                              X  7  2991  C 020 Y91          290
2014                MCW   MAINX&7,PREVS                              X  7  2998  M 008 H72          291
2015                BE    SWITCH                                      X  5  3005  B L01 S            291
2016                C     MAINX&7,@)00@                               X  7  3010  C 008 H83          291
2017                BU    LZFND                                       X  5  3017  B ?26 /            291
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

2018                SW    ZEROX                                        X   4  3022  , 188             291
2019         *
2020         *  RIGHT TO LEFT SCAN FOR LOZENGES
2021         *
2022         LZFND  ZA    @690@,INDEX1&1                               X   7  3026  ? H86 090         291
2023         LOZSC  BCE   LZCNT,MAINX&X1,)                             X   8  3033  B B38 0'1 )       292
2024         DEFND  S     &10,INDEX1&1                                 X   7  3041  S H66 090         292
2025                C     INDEX1,@15@                                  X   7  3048  C 089 H88         292
2026                BU    LOZSC                                        X   5  3055  B ?33 /           292
2027                S     INDEX1&1                                     X   4  3060  S 090             292
2028         CLEANC B     SCANXX                                       X   4  3064  B M19             292
2029                CW    MAINX&20,MAINX&20&X1                         X   7  3068  ) 021 0S1         293
2030                C     INDEX1,@51@                                  X   7  3075  C 089 H90         293
2031                BL    ENDCLN                                       X   5  3082  B A26 T           293
2032                C     MAINX&20&X1,@  @                             X   7  3087  C 0S1 H58         293
2033                BU    CLEANC                                       X   5  3094  B ?64 /           293
2034                BCE   ENDCLN,MAINX&5,*                             X   8  3099  B A26 006 *       293
2035                SW    MAINX&20&X1                                  X   4  3107  , 0S1             294
2036                MCW   BLANKS-4,MAINXX&71                           X   7  3111  M W12 072         294
2037                MCW   MAINXX&71                                    X   4  3118  M 072             294
2038                CW    MAINXX&20&X1                                 X   4  3122  ) 0S1             294
2039         *
2040         *   RIGHT TO LEFT SCAN FOR LOZENGES  6 - 20
2041         *
2042         ENDCLN MCW   @015@,INDEX1                                 X   7  3126  M H93 089         294
2043                SBR   ZONCH&3,UPENGL                               X   7  3133  H J07 A48         294
2044         ENGLOZ BCE   LOZENG,MAINX&X1,)                            X   8  3140  B '57 0'1 )      295
2045         UPENGL S     &10,INDEX1&1                                 X   7  3148  S H66 090         295
2046                C     INDEX1,@04@                                  X   7  3155  C 089 H95         295
2047                BU    ENGLOZ                                       X   5  3162  B A40 /           295
2048         OUTSD  SBR   ZONCH&3,DEFND                                X   7  3167  H J07 ?41         295
2049         SHIFTL NOP   PARTB,MAINX&10                               X   7  3174  N 466 011        296
2050                MCW   @N@,SHIFTL                                   X   7  3181  M H45 A74        296
2051                C     MAINX&18,WHOOPS                              X   7  3188  C 019 W05        296
2052                BE    MASKS                                        X   5  3195  B J44 S          296
2053                C     MAINX&19,INCLD                               X   7  3200  C 020 U59        296
2054                BE    MASKS                                        X   5  3207  B J44 S          296
2055                B     BOUTS                                        X   4  3212  B R50            297
2056         TDFLIB DCW   &KINGS                                       X   3  3218  U63              297
2057                DCW   @M%U1001R@                                   X   8  3226                   297
2058         TDFLB2 DCW   &EOF1B                                       X   3  3229  '44              297
2059                DCW   @M%U1001R@                                   X   8  3237                   297
2060         *
2061         *   PROCESS LOZENGED FIELDS  21  -  72
2062         *
2063         LZCNT  BCE   DEFND,MAINX&1&X1,                            X   8  3238  B ?41 0'2         297
2064                SW    MAINX&X1,MAINX&3&X1                          X   7  3246  , 0'1 0'4         298
2065                BM    SYSTM,MAINX&2&X1                             X   8  3253  V C56 0'3 K       298
2066                B     LABEL                                        X   4  3261  B /19            298
2067                MCW   INDEX3,SAVX3#3                               X   7  3265  M 099 H98         298
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

2068                S     INDEX3,WAREA                                 X   7  3272  S 099 W22         298
2069                MZ    BLANKS,WAREA                                 X   7  3279  Y W16 W22         299
2070                MCW   @I99@,INDEX3                                 X   7  3286  M I01 099        299
2071                S     WAREA,INDEX3                                 X   7  3293  S W22 099        299
2072                MCW   @I@,INDEX3-2                                 X   7  3300  M I02 097        299
2073                C     INDEX3,@I9F@                                 X   7  3307  C 099 I05        299
2074                BL    SPTYP                                        X   5  3314  B C78 T           300
2075                MCW   MAINX&76&X3,MAINX&72                         X   7  3319  M 0G7 073        300
2076                SBR   MOVE3&6                                      X   4  3326  H C47             300
2077         LMN    CW    MAINX&3&X1                                   X   4  3330  ) 0'4            300
2078                MCW   SAVX3,INDEX3                                 X   7  3334  M H98 099        300
2079         MOVE3  MCW   0&X3,0                                       X   7  3341  M 0?0 000        300
2080                CW    MAINX&X1                                     X   4  3348  ) 0'1            300
2081                B     DEFND                                        X   4  3352  B ?41            301
2082         SYSTM  MCW   MAINX&68,MAINX&71                            X   7  3356  M 069 072        301
2083                MCW   SYMNM                                        X   4  3363  M W01            301
2084                CW    MAINX&X1,MAINX&3&X1                          X   7  3367  ) 0'1 0'4        301
2085                B     DEFND                                        X   4  3374  B ?41            301
2086         *
2087         *  SPECIALIZED PROCESSING OF ONE AND TWO CHARACTER OPERANDS
2088         *
2089         SPTYP  LCA   MAINX&72,OUTPT&72                            X   7  3378  L 073 I84        301
2090                CW    MAINX&X1,MAINX&3&X1                          X   7  3385  ) 0'1 0'4        302
2091                MCW   BLANKS-2,MAINX&71                            X   7  3392  M W14 072        302
2092                BCE   HOUSE,INDEX3,H                               X   8  3399  B D22 099 H      302
2093                MCW   OUTPT&72,MAINX&71                            X   7  3407  M I84 072        302
2094                SBR   MOVE3&6                                      X   4  3414  H C47            302
2095                B     SPOUT                                        X   4  3418  B D33            302
2096         HOUSE  MCW   OUTPT&72,MAINX&70                            X   7  3422  M I84 071        303
2097                SBR   MOVE3&6                                      X   4  3429  H C47            303
2098         SPOUT  CW    OUTPT&3&X1                                   X   4  3433  ) I/5            303
2099                B     LMN                                          X   4  3437  B C30            303
2100         DELET  BW    LBLMV,ZEROX                                  X   8  3441  V D53 188 1       303
2101                B     HARMN                                        X   4  3449  B R65            303
2102         LBLMV  MCW   @M@,SHIFTL                                   X   7  3453  M I06 A74        303
2103                CW    ZEROX                                        X   4  3460  ) 188            304
2104                B     HARMN                                        X   4  3464  B R65            304
2105         MLBLZ  MCW   SYMNM,MAINX&10                               X   7  3468  M W01 011        304
2106                B     OUTSD                                        X   4  3475  B A67            304
2107         *
2108         *  PULL IN CALLED ROUTINES AT LTORG, END OR EXECUTE CARDS
2109         *
2110         EXITC  SBR   CEXIT1&3                                     X   4  3479  H G45            304
2111         RWDEXT RWD   1                                            X   5  3483  U %U1 R           304
2112         CWPRC  CW    NEWEST                                       X   4  3488  ) V98            304
2113         TPRD1  SW    100                                          X   4  3492  , 100            305
2114                MCW   LIPUT&1,100                                  X   7  3496  M 187 100        305
2115                B     CTAPEX                                       X   4  3503  B W50            305
2116                NOP   TDFEXT                                       X   4  3507  N T44            305
2117                C     MAINX&19,HEADR                               X   7  3511  C 020 Y91        305
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2118                BU    TPRD1                                      X  5  3518  B D92 /           305
2119         SOLUT  C     MAINX&7,@999@                              X  7  3523  C 008 H75         305
2120                BE    EOF1A                                      X  5  3530  B F56 S           306
2121         OPPENT MCW   ADDCAL,INDEX1                              X  7  3535  M W08 089         306
2122         PRTNER BCE   TPRD1,INDEX1-2,Y                           X  8  3542  B D92 087 Y       306
2123                SW    MAINX&5                                    X  4  3550  , 006             306
2124                C     0&X1,MAINX&7                               X  7  3554  C 0'0 008         306
2125                SAR   INDEX1                                     X  4  3561  Q 089             306
2126                BU    PRTNER                                     X  5  3565  B E42 /           307
2127                BW    TPRD1,1&X1                                 X  8  3570  V D92 0'1 1       307
2128                CW    MAINX&5                                    X  4  3578  ) 006             307
2129                SW    1&X1                                       X  4  3582  , 0'1             307
2130                SW    NEWEST                                     X  4  3586  , V98             307
2131         COOKER B     CTAPEX                                     X  4  3590  B W50             307
2132                NOP   TDFEXT                                     X  4  3594  N T44             307
2133                C     MAINX&18,WHOOPS                            X  7  3598  C 019 W05         308
2134                BE    SUBSET                                     X  5  3605  B J19 S           308
2135                C     MAINX&19,INCLD                             X  7  3610  C 020 U59         308
2136                BE    SUBSET                                     X  5  3617  B J19 S           308
2137                C     MAINX&19,HEADR                             X  7  3622  C 020 Y91         308
2138                BE    SOLUT                                      X  5  3629  B E23 S           308
2139                MCW   CHARCC,MAINX&74                           X  7  3634  M U61 075         309
2140                LCA   LOPUT&1,100                                X  7  3641  L I98 100         309
2141                B     SBROT                                      X  4  3648  B O33             309
2142                B     COOKER                                     X  4  3652  B E90             309
2143         EOF1A  MCW   ADDCAL,INDEX1                              X  7  3656  M W08 089         309
2144         COMBL  BCE   CEXIT,INDEX1-2,Y                           X  8  3663  B G26 087 Y       309
2145                C     0&X1,@   @                                 X  7  3671  C 0'0 H48         310
2146                SAR   INDEX1                                     X  4  3678  Q 089             310
2147                BE    CEXIT                                      X  5  3682  B G26 S           310
2148                BW    COMBL,1&X1                                 X  8  3687  V F63 0'1 1       310
2149                BW    RWDEXT,NEWEST                              X  8  3695  V D83 V98 1       310
2150         *
2151         *  CREATE COMMENTS CARD FOR UNKNOWN  SUBROUTINES
2152         *
2153         UNKNWN B     NOROT                                      X  4  3703  B T75             310
2154                SW    1&X1                                       X  4  3707  , 0'1             311
2155                MCW   3&X1,MAINX&10                              X  7  3711  M 0'3 011         311
2156                B     SBROT                                      X  4  3718  B O33             311
2157                B     COMBL                                      X  4  3722  B F63             311
2158         CEXIT  CS    CALLT                                      X  4  3726  / !73             311
2159                CS                                               X  1  3730  /                 311
2160                CW    100                                        X  4  3731  ) 100             311
2161                MCW   @999@,PREVS                                X  7  3735  M H75 H72         312
2162         CEXIT1 B     0                                          X  4  3742  B 000             312
2163         SBGRD  SBR   GRAND&3                                    X  4  3746  H G57             312
2164                S     INDEX1&1                                   X  4  3750  S 090             312
2165         GRAND  BW    0,0&X2                                     X  8  3754  V 000 0!0 1       312
2166                S     @10@,INDEX2&1                              X  7  3762  S I08 095         312
2167                A     @1@,INDEX1                                 X  7  3769  A H59 089         313
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2168                B     GRAND                                      X  4  3776  B G54             313
2169         CALLCD CS    LMAINX                                     X  4  3780  / 086             313
2170                B     CTAPE                                      X  4  3784  B W50             313
2171                NOP   TDFEXT                                     X  4  3788  N T44             313
2172                MCW   CHARCS,MAINX&74                           X  7  3792  M U60 075         313
2173                SW    1                                          X  4  3799  , 001             313
2174                B     THRU                                       X  4  3803  B N82             314
2175         IOCSAV DCW   #4                                         X  4  3810                      314
2176         CHAINX MCW   @R@,MAINX&74                               X  7  3811  M H67 075         314
2177                B     WHYYY                                      X  4  3818  B K97             314
2178         MIDLE  MCW   INDEX3,DECTB&X2                            X  7  3822  M 099 UR2         314
2179                B     LOWER                                      X  4  3829  B V46             314
2180         ABOVE  MCW   INDEX3,DECTB&X2                            X  7  3833  M 099 UR2         314
2181                B     BELOW                                      X  4  3840  B P94             315
2182                LTORG *                                         X           3844
                    DCW   @B@                                       X  1  3844            LIT   315
                    DCW   @N@                                       X  1  3845            LIT   315
                    DCW   @   @                                     X  3  3848            LIT   315
                    DCW   @7@                                       X  1  3849            LIT   315
                    DCW   @ @                                       X  1  3850            LIT   315
             SAVXL2 DCW   #03                                       X  3  3853            AREA  315
                    DCW   @DCW@                                     X  3  3856            LIT   316
                    DCW   @  @                                      X  2  3858            LIT   316
                    DCW   @1@                                       X  1  3859            LIT   316
                    DCW   @52@                                      X  2  3861            LIT   316
                    DCW   @510@                                     X  3  3864            LIT   316
                    DCW   &10                                       X  2  3866            LIT   316
                    DCW   @R@                                       X  1  3867            LIT   316
                    DCW   @3@                                       X  1  3868            LIT   317
                    DCW   @,@                                       X  1  3869            LIT   317
             PREVSX DCW   #03                                       X  3  3872            AREA  317
                    DCW   @999@                                     X  3  3875            LIT   317
                    DCW   @B    @                                   X  5  3880            LIT   317
                    DCW   @)00@                                     X  3  3883            LIT   317
                    DCW   @690@                                     X  3  3886            LIT   317
                    DCW   @15@                                      X  2  3888            LIT   318
                    DCW   @51@                                      X  2  3890            LIT   318
                    DCW   @015@                                     X  3  3893            LIT   318
                    DCW   @04@                                      X  2  3895            LIT   318
             SAVX3X DCW   #03                                       X  3  3898            AREA  318
                    DCW   @I99@                                     X  3  3901            LIT   318
                    DCW   @I@                                       X  1  3902            LIT   318
                    DCW   @I9F@                                     X  3  3905            LIT   319
                    DCW   @M@                                       X  1  3906            LIT   319
                    DCW   @10@                                      X  2  3908            LIT   319
2183         *
2184         *  OUTPUT AREA
2185         *
2186                ORG   3912                                      X           3912
2187         OUTPT  DA    1X86,G                                     X     3912  3997
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

2187              DCW   @"@                                          X   1  3998             GMARK  320
2188         LOPUT  EQU   *-1                                         X      3997
2189              EX                                                 X           B 000              321
2190              END   START                                        X           / Z00 080
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SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ABOVEX	3833	ACRWED	958	ACTOUT	1143	ACTSCN	1113	ACTUAL	2089	ADDCAL	1608	AGREEI	1935
ALDIOI	3203	ALDTFI	3308	ALLDIO	2347	ALPHAI	2430	ALTBYI	1497	ALTERI	2763	ALTERX	1977
ALTIOI	2883	ALTR3B	631	ALTR4B	576	ALTR5B	651	ALTR6B	662	ALTS1I	2847	ALTS2E	2860
ALTS2I	2867	ALTS3I	3062	ALTS4E	3075	ALTS4I	3082	ALTSAB	486	ANTPER	955	ANTSTA	803
AREASV	331	ATLOKX	2520	B	86	BALTRI	3903	BELOWX	2794	BETTER	2376	BLANKA	999
BLANKS	1616	BLKFDI	1097	BLORBI	1572	BLOWAI	1602	BLUEI	627	BOUTSX	2950	BRNCHX	2696
BRTBLI	886	BSPT4I	2904	BTREND	2825	BUT1XX	2637	BUT2XX	2689	BYPASX	522	BYPSSI	3349
BYPSXI	3377	CALITX	2158	CALLCD	3780	CALLNX	2151	CALLTX	2073	CALTRB	602	CARDSB	525
CARDSX	189	CBSP1X	604	CBSP2X	543	CBSP3X	574	CCHALT	1834	CCOMPR	1743	CCONPR	1767
CEORCX	1738	CERASC	1898	CERRCT	1895	CETWMS	2498	CEXIT1	3742	CEXITX	3726	CHAINX	3811
CHAIRI	2663	CHALTX	1849	CHANGE	708	CHARCC	1461	CHARCR	1462	CHARCS	1460	CHARTA	665
CHECKI	3005	CHEXZI	3487	CHTAPI	1187	CHUCKI	231	CHZONX	2074	CIRCLX	1144	CLEANC	3064
CLUBSI	2610	CLUBSX	2509	CMALTB	510	CMCTLI	157	CNTPX	1619	COMBLK	2312	COMBLX	3663
COMEQI	984	COMETS	1762	COMIOC	831	COMPRI	851	COMSNX	2779	CONTIN	2301	COOKER	3590
COUTBI	3708	CRDCLI	138	CRDOUT	2168	CRWRED	1771	CTAPEC	1722	CTAPEI	1222	CTAPEX	1650
CTROWX	1810	CWPRCX	3488	CXIT1X	2455	CXITX	2502	DBLALI	3013	DBLCKI	3272	DECTBX	1492
DEFNDX	3041	DELETX	3441	DELTAI	2410	DIFREC	2406	DIMNDX	2251	DIOCSB	576	DIOSBI	1147
DIVIDE	568	DRITBI	3682	DTFBRI	1727	DTFGMI	568	DTFINT	1650	DTFLAB	3803	DTFNDI	713
DTFNMI	2391	DTFOUT	2446	DTFTAB	349	EITHER	333	ENDCLN	3126	ENDDCX	1519	ENDDIO	622
ENDDTF	567	ENDSTB	1002	ENDSTX	1478	ENGLOZ	3140	ENTSTA	795	ENTSTB	879	EOF1AX	3656
EOF1BX	1044	EOF1X	2860	EOF4A	934	EXIRBI	2031	EXISBI	992	EXITBI	3669	EXITCX	3479
EXSETA	857	EXSETB	474	FDBLKI	1090	FEATBI	3552	FEWA	605	FILENM	349	FILXZI	3423
FINAL2	3261	FINALI	3252	FINDI	642	FOUNDI	1105	GAMMAI	685	GM1X	1649	GM2XXX	1043
GMOVL2	332	GMOVL4	606	GMWMRK	773	GOODI	2197	GOTITI	670	GRANDX	3754	HALTI	1921
HAPPYX	2570	HARMNX	2965	HAULIT	1264	HEADRX	1891	HEARBI	2537	HEARTX	2309	HLDA1B	1022
HLDA1I	3902	HLDBI	3907	HLDSBX	192	HOLEX	2055	HOMALI	2812	HOMEXX	2648	HOOHAA	745
HOUSEX	3422	ICHALT	1407	ICOMPR	1315	ICONPR	1340	IEORCI	1310	IERASC	1643	IERRCT	1641
IHALTI	1422	INCLDX	1459	INDEX1	89	INDEX2	94	INDEX3	99	INDRBI	2071	IOARBI	1947
IOCALT	106	IOCEOF	141	IOCSAV	3810	IODTBI	3577	IOMETS	1335	IRWRED	1344	ITAPEC	1294
ITROWI	1383	KDIOCS	1571	KINGSX	1463	LABDIO	580	LABDTF	350	LABELX	1119	LABTBI	3620
LBLMVX	3453	LBLTBL	3846	LEAVEI	167	LENGTH	743	LETBEI	171	LEXITX	1260	LIPUTX	186
LITORG	1358	LMAINX	86	LMNX	3330	LODPAR	2219	LONGI	2157	LOOPWX	2606	LOPUTI	3998
LOPUTX	3997	LORGSA	918	LORGSB	494	LOWERX	1546	LOZENG	1057	LOZSCX	3033	LSTCDB	686
LSTPAR	2675	LUNETI	3334	LZCNTX	3238	LZFNDX	3026	MACROB	931	MAINXI	1	MAINXX	1
MANYA	633	MASETX	1433	MASKSX	2144	MCOUTB	958	MIDLEX	3822	MINUS2	2	MINUS3	3
MLBLZX	3468	MODXZI	3430	MOVE3X	3341	MOVECX	1520	MOVINP	1199	MSUBTX	2700	NEWEED	2554
NEWEST	1598	NEWSCN	1006	NEWWRT	2135	NEXREC	681	NEXTCD	2566	NOALTB	2820	NOCALX	2220
NOPCLI	183	NOPJBI	205	NORDRL	1612	NOROTX	1375	NOSIRA	914	NOSOLI	131	NOTERI	220
NPCLXI	201	NPJBXI	216	NROTCX	1411	NTPERA	881	NUMERC	1541	NUORIG	1044	NWEXTI	1101
NWSCNL	1021	OKAYB	467	OPDARI	1626	OPDFND	2687	OPDRTN	2625	OPDSCN	2614	OPPENT	3535
ORDNI	3185	OTHERI	101	OUTCLI	119	OUTIOC	859	OUTMCB	943	OUTPTI	3912	OUTPTX	3912
OUTS2A	758	OUTSBX	2641	OUTSDX	3167	OVEJKI	2020	OVERBI	2006	OVERI	1649	OVEXZI	3513
OVLAY2	2732	OVLY3I	341	OVLY4I	434	PACKSI	3001	PACKXI	2943	PARKSI	2993	PARTBX	466
PASS2I	1506	PASSII	1460	POTSX	1415	PREEMB	506	PREPS2	662	PREVSX	3872	PROPRE	2840
PRTNER	3542	PUNCHI	101	PUTINX	1244	QUEENX	2216	RDT4AI	3241	RDTP1X	2865	READSI	3910
READTA	467	REASBI	1173	REATBI	3727	RECXZI	3455	REDA	132	REDEXT	806	REDREC	774
REGENI	3144	REGLI	2927	REWXZI	3500	RHOA	763	RIVERI	2494	RNDTFI	2516	ROBINI	623
RSOLVI	175	RTWEDA	677	RTWEDI	798	RWDEXT	3483	RWDTBI	3695	SAVCDI	2698	SAVX1X	1611
SAVX2I	3889	SAVX3X	3898	SAVXL1	3865	SAVXL2	3853	SAVXTI	3330	SAVXXI	3319	SBGRDX	3746
SBROTX	2633	SCANLI	2559	SCANLX	2423	SCANXI	2555	SCANXX	2419	SCNATX	2513	SCNSWI	1618
SEARCH	2108	SEEKI	1692	SEEKOP	2636	SETDSW	2505	SETITI	2602	SETWMS	2606	SGCX	2718
SHIFTL	3174	SHORTI	750	SIMPLE	1338	SKELCX	2917	SLAMX	2345	SLASHX	2108	SOFTI	3268
SOLUTX	3523	SOLVED	2872	SPADEX	2209	SPCASI	3174	SPECLI	337	SPOUTX	3433	SPTYPX	3378
STARTA	101	STARTI	101	STARTX	1900	STENDX	450	STRING	156	SUBSET	2119	SUREXX	1308
SVCDXI	2717	SWITCH	2301	SWMA1A	526	SWMA1B	752	SWMA2A	533	SWMA2B	759	SYMNMI	340
SYMNMX	1601	SYSTMX	3356	TABLEI	1374	TAPTBI	3533	TDF1I	2723	TDF4A	699	TDF4AI	3135
TDF4I	812	TDF5X	1589	TDF6I	764	TDF6X	2624	TDF9I	412	TDFEOJ	594	TDFEXT	1344
TDFIO5	132	TDFLB2	3229	TDFLIB	3218	TDFRAL	922	TDFSSX	1968	TDFSYS	423	TENSRX	1170
THRUI	634	THRUX	2582	TOTJKI	1995	TOTRBI	1981	TOTXZI	3520	TPRD1X	3492	TREADA	471

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TREADB    697    TRPCKI   3284    TSTENA    775    TUFFI    3103    TUNELI   2888    TWDB1A    693    TWEDBA    653
TYPXZI   3474    UNKNWN   3703    UPENGL   3148    UPPERI    821    VOICEB    101    WALKI    2896    WAREAX   1622
WEDDBX   2547    WEDXTX   2618    WEEDBX   2539    WEEDDX   1565    WHOMI     677    WHOOPS   1605    WHYYYX   2297
WKAREA   2390    WRTALI   3037    WRTEXT    758    WRTREC    721    XCARDS   3909    XXXXX    2290    YESIRA    896
YOURSB    541    YSCALX   2169    ZEROXX    188    ZONBRX   2097    ZONCHX   2104
     *****  **     3 Errors                                                                          ERROR
```