```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101               JOB   FORTRAN COMPILER -- CONDENSED DECK PHASE 2 -- 58
 102               CTL   6611
 103         *
 104         * THIS PHASE PUNCHES CARDS THAT WILL INITIALIZE THE INDEX
 105         * REGISTERS AND SENSE LIGHTS, THE SNAPSHOT OR THE LINKAGE
 106         * ROUTINE, THE ARITHMETIC ROUTINE, AND CERTAIN FINAL
 107         * ADDRESSES AND CONSTANTS.
 108         *
 109         * STUFF IN THE RESIDENT AREA
 110         *
 111         GLOBER EQU   184  GLOBAL ERROR FLAG -- WM MEANS ERROR                0184
 112         GOTXL  EQU   185  XLINKF WAS REFERENCED IF NO WM                     0185
 113         RELTAB EQU   188  RELOCATABLE FUNCTION TABLE ENTRY ADDRESSES         0188
 114         SUBENT EQU   191  ENTRY TO SUBSCRIPT ROUTINE                        0191
 115         SNAPSH EQU   333  CORE DUMP SNAPSHOT                                 0333
 116         IMOD   EQU   690  INTEGER MODULUS -- NUMBER OF DIGITS               0690
 117         MANTIS EQU   692  FLOATING POINT MANTISSA DIGITS & 2                 0692
 118         CONDNS EQU   693  P FOR CONDENSED DECK                               0693
 119         LOADNX EQU   700  LOAD NEXT OVERLAY                                  0700
 120         CLEARL EQU   707  CS AT START OF OVERLAY LOADER                      0707
 121         CDOVLY EQU   769  1 IF RUNNING FROM CARDS, N IF FROM TAPE           0769
 122         TPREAD EQU   780  TAPE READ INSTRUCTION IN OVERLAY LOADER            0780
 123         LOADXX EQU   793  EXIT FROM OVERLAY LOADER                           0793
 124         CLRBOT EQU   833  BOTTOM OF CORE TO CLEAR IN OVERLAY LOADER         0833
 125         *
 126         * ADDRESS IN PHASE 57
 127         *
 128         PUNCH  EQU   838  PUNCH A CARD AND MAYBE PRINT IT TOO                0838
 129         *
 130         * ADDRESSES IN ARITF
 131         *
 132         SETFP  EQU   831   PUT MANTISSA WIDTH INTO B                         0831
 133         QFUNCT EQU   1327  BRANCH TO FUNCTION SELECTOR                       1327
 134         DOSUB  EQU   1206  BRANCH TO SUBSCRIPT ROUTINE                       1206
 135         ARITI  EQU   1530  PUT INTEGER SIZE IN B                           1530
 136         *
 137               ORG   884                                                            0884
 138    884  BEGINN MCW   CDOVLY,R2                                          7  0884  M 769 |74            4
 139    891         BW    SKIPX1,GOTXL  NEED XLINKF IF NO WM, SKIP IF WM     8  0891  V 984 185 1          4
 140         *
 141         * SKIP SNAPSHOT
 142         *
 143    899         MCW   CDOVLY,R1  READ OR NOP                            7  0899  M 769 920            4
 144    906         SBR   TSTCNT&3,RT1                                      7  0906  H /17 931            4
 145    913         SBR   TAPERX&3,RESET1                                   7  0913  H /30 924            4
 146    920  R1     R     TEST1                                             4  0920  1 944                5
 147    924  RESET1 MCW   KP9,ERRCNT                                        7  0924  M V36 V85            5
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
148    931  RT1    RT    1,1                                                  8  0931  M %U1 001 R          5
149    939         BER   TAPERR                                              5  0939  B /02 L              5
150    944  TEST1  BCE   *&5,68,B                                            8  0944  B 956 068 B          5
151    952         B     R1                                                 4  0952  B 920                5
152         *
153         * SETUP SECOND READER TO PUNCH
154         *
155    956         SBR   SWICH2&3,TEST2                                     7  0956  H /01 /31            6
156    963         SBR   TSTCNT&3,RT2                                       7  0963  H /17 |85            6
157    970         SBR   TAPERX&3,RESET2                                    7  0970  H /30 |78            6
158    977         A     KP1,W1                                             7  0977  A V37 V86            6
159    984  SKIPX1 BCE   *&5,CONDNS,P                                       8  0984  B 996 693 P          6
160    992         B     R2                                                 4  0992  B |74                7
161    996         BW    ERRMSG,GLOBER                                      8  0996  V /66 184 1          7
162         *
163         * SET INDEX REGISTERS AND SENSE LIGHTS WITH ZEROES
164         * PART OF ARITF DECK NOW
165         *
166  1 004         MCW   R40&3,171                                          7  1004  M V41 171            7
167  1 011         MCW   LOAD1  TO SET INDEX REGISTERS AND SENSE LIGHTS     4  1011  M V69                7
168  1 015         CS                                                       1  1015  /                    7
169  1 016         LCA   KZ14,114  ZEROES                                   7  1016  L V83 114            7
170  1 023         MCW   BRANCH,SWICH1                                     7  1023  M V84 |70            7
171  1 030         B     PUNCH  WHY BOTHER; IT'S IN ARITF DECK ???          4  1030  B 838                8
172         *
173         * LOAD TOPCOR, IMOD, MANTIS, GMWM
174         *
175  1 034         MCW   R40&3,171                                          7  1034  M V41 171            8
176  1 041         MCW   LOAD                                               4  1041  M V34                8
177  1 045         CS                                                       1  1045  /                    8
178  1 046         MCW   LOAD2,157  LOAD MANTIS, IMOD, TOPCOR               7  1046  M U63 157            8
179  1 053         SW    GMWM                                               4  1053  , W12                8
180  1 057         MCW   GMWM,108                                           7  1057  M W12 108            8
181  1 064         MCW   MANTIS  FP SIZE                                    4  1064  M 692                9
182  1 068         MCW           INTEGER SIZE                               1  1068  M                    9
183  1 069         LCA           TOPCOR                                     1  1069  L                    9
184  1 070  SWICH1 NOP   PUNCH   SOMETIMES BRANCH                           4  1070  N 838                9
185         *
186         * COPY OR SKIP A DECK
187         *
188  1 074  R2     R     SWICH2                                             4  1074  1 |98                9
189  1 078  RESET2 MCW   KP9,ERRCNT                                         7  1078  M V36 V85            9
190  1 085  RT2    RT    1,1                                                8  1085  M %U1 001 R          9
191  1 093         BER   TAPERR                                              5  1093  B /02 L             10
192  1 098  SWICH2 B     CHG2  SOMETIMES TEST2, SOMETIMES ENDEKS            4  1098  B /55               10
193  1 102  TAPERR BSP   1                                                  5  1102  U %U1 B             10
194  1 107         S     KP1,ERRCNT                                         7  1107  S V37 V85           10
195  1 114  TSTCNT BWZ   RT2,ERRCNT,B                                       8  1114  V |85 V85 B         10
196  1 122         NOP   3333                                               4  1122  N C33               10
197  1 126         H                                                        1  1126  .                   10
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  1 127  TAPERX B     RESET2                                                 4  1127  B |78              11
199  1 131  TEST2  BCE   END2,68,B                                              8  1131  B /85 068 B        11
200  1 139         MCW   71,171                                                7  1139  M 071 171          11
201  1 146         CHAIN 5                                                                 MACRO
202                MCW                                                        1  1146  M           GEN    11
203                MCW                                                        1  1147  M           GEN    11
204                MCW                                                        1  1148  M           GEN    11
205                MCW                                                        1  1149  M           GEN    11
206                MCW                                                        1  1150  M           GEN    12
207  1 151         B     SWICH1                                               4  1151  B |70              12
208  1 155  CHG2   SBR   SWICH2&3,TEST2  SKIP FIRST CARD, PUNCH THE REST      7  1155  H /01 /31          12
209  1 162         B     R2                                                   4  1162  B |74              12
210         *
211         * ERRORS PREVENT CONDENSED DECK
212         *
213  1 166  ERRMSG CS    332                                                  4  1166  / 332              12
214  1 170         CS                                                         1  1170  /                  12
215  1 171         MCW   ERRORS,243                                           7  1171  M V06 243          12
216  1 178         W                                                          1  1178  2                  13
217  1 179         CC    J                                                    2  1179  F J                13
218  1 181         B     R2                                                   4  1181  B |74              13
219         *
220         * COPY ANOTHER DECK
221         *
222  1 185  END2   A     KP1,W1                                               7  1185  A V37 V86          13
223  1 192         BCE   ENDECK,W1,3                                          8  1192  B S95 V86 3        13
224  1 200         BCE   R2,W1,2                                              8  1200  B |74 V86 2        13
225  1 208         BW    *&5,GOTXL  SKIP XLINKF IF WM                         8  1208  V S20 185 1        13
226  1 216         B     R2         GET XLINKF IF NO WM                       4  1216  B |74              14
227  1 220         MCW   CDOVLY,R3                                            7  1220  M 769 S41          14
228  1 227         SBR   TSTCNT&3,RT3                                         7  1227  H /17 S52          14
229  1 234         SBR   TAPERX&3,RESET3                                      7  1234  H /30 S45          14
230         *
231         * SKIP A DECK
232         *
233  1 241  R3     R     TEST3                                                4  1241  1 S65              14
234  1 245  RESET3 MCW   KP9,ERRCNT                                           7  1245  M V36 V85          14
235  1 252  RT3    RT    1,1                                                  8  1252  M %U1 001 R        15
236  1 260         BER   TAPERR                                               5  1260  B /02 L            15
237  1 265  TEST3  BCE   *&5,68,B                                            8  1265  B S77 068 B        15
238  1 273         B     R3                                                   4  1273  B S41              15
239  1 277         SBR   TSTCNT&3,RT2                                         7  1277  H /17 |85          15
240  1 284         SBR   TAPERX&3,RESET2                                      7  1284  H /30 |78          15
241  1 291         B     END2                                                 4  1291  B /85              16
242  1 295  ENDECK SBR   SWICH2&3,ENDEKS                                      7  1295  H /01 T06          16
243  1 302         B     R2                                                   4  1302  B |74              16
244  1 306  ENDEKS BCE   DONE,SWICH1,N                                       8  1306  B U05 |70 N        16
245         *
246         * IMOD, MANTIS, RELTAB, SUBENT TO ARITF
247         *
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  1 314          CS    171                                               4  1314  / 171               16
249  1 318          SW    101                                               4  1318  , 101               16
250  1 322          MCW   R40&3,171                                        7  1322  M V41 171           16
251  1 329          MCW   LOAD                                              4  1329  M V34               17
252  1 333          MCW   MVIMOD&6,146  TO PUT IMOD INTO ARITF              7  1333  M V93 146           17
253  1 340          MCW   IMOD,102                                          7  1340  M 690 102           17
254  1 347          B     PUNCH                                             4  1347  B 838               17
255  1 351          MCW   WHERE,146     TO PUT MANTIS INTO ARITF            7  1351  M V96 146           17
256  1 358          MCW   MANTIS,102                                        7  1358  M 692 102           17
257  1 365          B     PUNCH                                             4  1365  B 838               18
258  1 369          MCW   FUNCE&3,146   MCW 3,QFUNC&3                      7  1369  M W00 146           18
259  1 376          MCW   RELTAB,103    RELOCATABLE FUNCTION TABLE ADDRESS  7  1376  M 188 103           18
260  1 383          B     PUNCH                                             4  1383  B 838               18
261  1 387          MCW   SUBE,146                                          7  1387  M W03 146           18
262  1 394          MCW   SUBENT,103                                        7  1394  M 191 103           18
263  1 401          B     PUNCH                                             4  1401  B 838               19
264          *
265  1 405  DONE    BSS   SNAPSH,C                                         5  1405  B 333 C             19
266  1 410          SBR   TPREAD&6,838                                     7  1410  H 786 838           19
267  1 417          SBR   CLRBOT                                            4  1417  H 833               19
268  1 421          SBR   LOADXX&3,838                                     7  1421  H 796 838           19
269  1 428          SBR   CLEARL&3,GMWM                                    7  1428  H 710 W12           19
270  1 435          LCA   CONDEK,110                                       7  1435  L W11 110           20
271  1 442          B     LOADNX                                            4  1442  B 700               20
272          *
273          * DATA
274          *
275  1 463  LOAD2   DCW   @L008693,689691,693@  TOPCOR IMOD MANTIS GMWM    18  1463                    20
276  1 506  ERRORS DCW   @CONDENSED DECK DEFERRED DUE TO INPUT ERRORS@     43  1506                    22
277  1 534  LOAD    DCW   @L039000,040040,040040,040040@                   28  1534                    22
278  1 535          DC    @$@                                               1  1535                    22
279  1 536  KP9     DCW   &9                                                1  1536                    22
280  1 537  KP1     DCW   &1                                                1  1537                    22
281  1 538  R40     R     40                                                4  1538  1 040             22
282  1 569  LOAD1   DCW   @L014100,092097,081082,083084@                   28  1569                    23
283  1 583  KZ14    DCW   @00000000000000@                                 14  1583                    24
284  1 584  BRANCH  B                                                       1  1584  B                 24
285  1 585  ERRCNT  DCW   #1  TAPE ERROR COUNT                             1  1585                    24
286  1 586  W1      DCW   #1                                                1  1586                    24
287  1 587  MVIMOD  MCW   2,ARITI&6  INTEGER SIZE TO ARITHMETIC ROUTINE     7  1587  M 002 V36         24
288  1 596  WHERE   DSA   SETFP&6    WHERE TO PUT FP SIZE                   3  1596  837               24
289  1 597  FUNCE   WR    QFUNCT&3   USED TO CREATE  MCW  3,QFUNCT&3        4  1597  3 T30             24
290  1 603  SUBE    DSA   DOSUB&3                                           3  1603  S09               25
291  1 611  CONDEK  DCW   @CONDECK3@                                       8  1611                    25
292  1 612  GMWM    DCW   @}@                                              1  1612            GMARK   25
293                 EX    BEGINN                                                  B 884             26
294                 END                                                           / 000 080
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ARITI	1530	BEGINN	884	BRANCH	1584	CDOVLY	769	CHG2	1155	CLEARL	707	CLRBOT	833
CONDEK	1611	CONDNS	693	DONE	1405	DOSUB	1206	END2	1185	ENDECK	1295	ENDEKS	1306
ERRCNT	1585	ERRMSG	1166	ERRORS	1506	FUNCE	1597	GLOBER	184	GMWM	1612	GOTXL	185
IMOD	690	KP1	1537	KP9	1536	KZ14	1583	LOAD	1534	LOAD1	1569	LOAD2	1463
LOADNX	700	LOADXX	793	MANTIS	692	MVIMOD	1587	PUNCH	838	QFUNCT	1327	R1	920
R2	1074	R3	1241	R40	1538	RELTAB	188	RESET1	924	RESET2	1078	RESET3	1245
RT1	931	RT2	1085	RT3	1252	SETFP	831	SKIPX1	984	SNAPSH	333	SUBE	1603
SUBENT	191	SWICH1	1070	SWICH2	1098	TAPERR	1102	TAPERX	1127	TEST1	944	TEST2	1131
TEST3	1265	TPREAD	780	TSTCNT	1114	W1	1586	WHERE	1596				