```
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

                          FORTRAN COMPILER -- FORMAT LOADER -- PHASE 54A                                  PAGE    1

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

 101                JOB   FORTRAN COMPILER -- FORMAT LOADER -- PHASE 54A
 102                CTL   6611
 103         *
 104         * THIS PHASE SELECTS THE PROPER I/O ROUTINE AND LOADS IT INTO
 105         * ITS OBJECT CORE-STORAGE LOCATION.
 106         *
 107         * LIMITED FORMAT ROUTINE IS FIRST (54B), NORMAL FORMAT ROUTINE
 108         * IS SECOND (54C), A-CONVERSION FORMAT ROUTINE IS THIRD (54D).
 109         *
 110         * STUFF IN THE RESIDENT AREA
 111         *
 112         PHASID EQU   110  PHASE ID, FOR SNAPSHOT DUMPS                             0110
 113         SNAPSH EQU   333  CORE DUMP SNAPSHOT                                       0333
 114         IMOD   EQU   690  INTEGER MODULUS -- NUMBER OF DIGITS                      0690
 115         FMTSW  EQU   696  X FOR NO FORMAT, L FOR LIMITED FORMAT                    0696
 116         *                 BLANK FOR ORDINARY, A FOR A CONVERSION
 117         LOADNX EQU   700  LOAD NEXT OVERLAY                                        0700
 118         CLEARL EQU   707  CS AT START OF OVERLAY LOADER                            0707
 119         CDOVLY EQU   769  1 IF RUNNING FROM CARDS, N IF FROM TAPE                  0769
 120         TPREAD EQU   780  TAPE READ INSTRUCTION IN OVERLAY LOADER                  0780
 121         LOADXX EQU   793  EXIT FROM OVERLAY LOADER                                 0793
 122         CLRBOT EQU   833  BOTTOM OF CORE TO CLEAR IN OVERLAY LOADER                0833
 123         *
 124         * RUNTIME ADDRESSES
 125         *
 126         FMTBAS EQU   1697  BASE ADDRESS OF LIMITED AND NORMAL                      1697
 127         FMTBAA EQU   4280  BASE ADDRESS OF A-CONVERSION                            4280
 128         AGM    EQU   4616  GMWM AT END OF A-CONVERSION                             4616
 129         LGM    EQU   2015  GMWM AT END OF LIMITED ROUTINE                          2015
 130         NGM    EQU   4279  GMWM AT END OF NORMAL ROUTINE           V3M4            4279
 131         NSWICH EQU   3138  SWITCH IN NORMAL ROUTINE                                3138
 132         *
 133                ORG   934                                                                  0934
 134     934 BEGINN SW    GMWM,FMTBAS                                            7  0934  , S53 W97           4
 135     941        BCE   TAPE,CDOVLY,N                                          8  0941  B |59 769 N         4
 136         *
 137         * LOAD FORMAT ROUTINE FROM CARDS
 138         *
 139     949        BCE   CARDL,FMTSW,L                                          8  0949  B |26 696 L         4
 140     957 SKIP1  R           SKIP LIMITED ROUTINE (54B)                       1  0957  1                   4
 141     958        BCE   *&5,68,B  EX CARD?                                     8  0958  B 970 068 B         4
 142     966        B     SKIP1                                                  4  0966  B 957               4
 143     970        BCE   CARDX,FMTSW,X                                          8  0970  B |34 696 X         5
 144     978        R     40    LOAD NORMAL ROUTINE (54C)                        4  0978  1 040               5
 145     982 NRET   CW    NGM   RETURN HERE FROM NORMAL LOAD                     4  0982  ) 27Z               5
 146     986        C     IMOD,K01                                               7  0986  C 690 S39           5
 147     993        BU    CTESTA                                                 5  0993  B |05 /             5
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                         FORTRAN COMPILER -- FORMAT LOADER -- PHASE 54A                                PAGE    2

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

148    998         LCA   NOP,NSWICH                                              7  0998  L S40 A38            5
149  1 005  CTESTA BCE   CARDA,FMTSW,A                                           8  1005  B |47 696 A          6
150  1 013  SKIP2  R                                                             1  1013  1                    6
151  1 014         BCE   DONE,68,B  EX CARD?                                     8  1014  B /41 068 B          6
152  1 022         B     SKIP2                                                   4  1022  B |13                6
153  1 026  CARDL  R     40    LOAD LIMITED ROUTINE (54B)                        4  1026  1 040                6
154  1 030  LRET   CW    LGM   RETURN HERE FROM LIMITED LOAD                     4  1030  ) !15                6
155  1 034  CARDX  R                                                             1  1034  1                    6
156  1 035         BCE   CTESTA,68,B  EX CARD?                                   8  1035  B |05 068 B          7
157  1 043         B     CARDX                                                   4  1043  B |34                7
158  1 047  CARDA  R     40    LOAD A-CONVERSION ROUTINE (54D)                   4  1047  1 040                7
159  1 051  ARET   CW    AGM   RETURN HERE FROM A-CONVERSION LOAD                4  1051  ) 61W                7
160  1 055         B     DONE                                                    4  1055  B /41                7
161         *
162         * LOAD FORMAT ROUTINE FROM TAPE
163         *
164  1 059  TAPE   BCE   TAPEL,FMTSW,L                                           8  1059  B /64 696 L          7
165  1 067         RTW   1,GMWM    SKIP LIMITED FORMAT ROUTINE                   8  1067  L %U1 S53 R          8
166  1 075         BER   TAPERR                                                  5  1075  B S11 L              8
167  1 080         BCE   TAPEX,FMTSW,X                                           8  1080  B /77 696 X          8
168  1 088         RTW   1,FMTBAS  LOAD NORMAL FORMAT ROUTINE                    8  1088  L %U1 W97 R          8
169  1 096         BER   TAPERR                                                  5  1096  B S11 L              8
170  1 101         C     IMOD,K01                                                7  1101  C 690 S39            9
171  1 108         BU    *&8                                                     5  1108  B /20 /              9
172  1 113         LCA   NOP,NSWICH                                              7  1113  L S40 A38            9
173  1 120         BCE   TAPEA,FMTSW,A                                           8  1120  B /94 696 A          9
174  1 128  SKIPA  RTW   1,GMWM    SKIP A-CONVERSION ROUTINE                     8  1128  L %U1 S53 R          9
175  1 136         BER   TAPERR                                                  5  1136  B S11 L             10
176  1 141  DONE   BSS   SNAPSH,C                                                5  1141  B 333 C             10
177  1 146         SBR   CLEARL&3,GMWM                                           7  1146  H 710 S53           10
178  1 153         LCA   REPL2,PHASID                                            7  1153  L S49 110           10
179  1 160         B     LOADNX                                                  4  1160  B 700               10
180  1 164  TAPEL  RTW   1,FMTBAS  LOAD LIMITED ROUTINE                          8  1164  L %U1 W97 R         10
181  1 172         BER   TAPERR                                                  5  1172  B S11 L             11
182  1 177  TAPEX  RTW   1,GMWM    SKIP NORMAL ROUTINE                           8  1177  L %U1 S53 R         11
183  1 185         BER   TAPERR                                                  5  1185  B S11 L             11
184  1 190         B     SKIPA                                                   4  1190  B /28               11
185  1 194  TAPEA  RTW   1,FMTBAA  LOAD A-CONVERSION ROUTINE                     8  1194  L %U1 28| R         11
186  1 202         BER   TAPERR                                                  5  1202  B S11 L             11
187  1 207         B     DONE                                                    4  1207  B /41               11
188         *
189         * TAPE ERROR ROUTINE
190         *
191  1 211  TAPERR SBR   TAPERX&3                                                4  1211  H S37               12
192  1 215         MA    AM13,TAPERX&3  BACK UP EXIT TO READ INSTRUCTION         7  1215  # S52 S37           12
193  1 222         BSP   1                                                       5  1222  U %U1 B             12
194  1 227         H     3333,3333                                               7  1227  . C33 C33           12
195  1 234  TAPERX B     0                                                       4  1234  B 000               12
196         *
197         * DATA
```

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

 198         *
 199  1 239  K01    DCW   01                                                       2  1239                      12
 200  1 240  NOP    NOP                                                            1  1240  N                   12
 201  1 249  REPL2  DCW   @REPLACE 2@                                              9  1249                      13
 202  1 252  AM13   DSA   15987  -13 AS AN ADDRESS                                 3  1252  I8G                 13
 203  1 253  GMWM   DCW   @}@                                                      1  1253             GMARK    13
 204                EX    BEGINN                                                            B 934               14
 205                END                                                                     / 000 080
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SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
AGM	4616	AM13	1252	ARET	1051	BEGINN	934	CARDA	1047	CARDL	1026	CARDX	1034
CDOVLY	769	CLEARL	707	CLRBOT	833	CTESTA	1005	DONE	1141	FMTBAA	4280	FMTBAS	1697
FMTSW	696	GMWM	1253	IMOD	690	K01	1239	LGM	2015	LOADNX	700	LOADXX	793
LRET	1030	NGM	4279	NOP	1240	NRET	982	NSWICH	3138	PHASID	110	REPL2	1249
SKIP1	957	SKIP2	1013	SKIPA	1128	SNAPSH	333	TAPE	1059	TAPEA	1194	TAPEL	1164
TAPERR	1211	TAPERX	1234	TAPEX	1177	TPREAD	780						