```
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 -- INPUT/OUTPUT ONE -- PHASE 32                          PAGE    1

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

 101                JOB   FORTRAN COMPILER -- INPUT/OUTPUT ONE -- PHASE 32
 102                CTL   6611
 103         *
 104         * THE LINKAGE TO THE OBJECT FORMAT ROUTINE FROM THE INPUT-OUTPUT
 105         * STATEMENTS IS GENERATED IN-LINE.
 106         *
 107         * ON ENTRY, X1 IS THE TOP OF STATEMENTS, AND X3 IS ONE BELOW
 108         * THE LABEL TABLE AT THE TOP OF CORE.
 109         *
 110         X1     EQU   89                                                    0089
 111         X2     EQU   94                                                    0094
 112         X3     EQU   99                                                    0099
 113         *
 114         * STUFF IN THE RESIDENT AREA
 115         *
 116         PHASID EQU   110  PHASE ID, FOR SNAPSHOT DUMPS                    0110
 117         GLOBER EQU   184  GLOBAL ERROR FLAG -- WM MEANS ERROR             0184
 118         SNAPSH EQU   333  CORE DUMP SNAPSHOT                              0333
 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         *
 123         BOTFMT EQU   154  BOTTOM OF FORMAT STRINGS OR NUMBER TABLE - 1    0154
 124         *
 125                ORG   838                                                        0838
 126         LOADDD EQU   *&1          LOAD ADDRESS                            0838
 127    838  BEGINN SW    GM                                              4  0838  , W27                4
 128    842  LOOP   BCE   OTHER,0&X1,                                     8  0842  B 886 0|0            4
 129    850         LCA   0&X1,CODADR                                     7  0850  L 0|0 W49            4
 130    857         CW    FLAG                                            4  0857  ) X57                4
 131    861         SW    CODADR-3                                        4  0861  , W46                4
 132    865         MCW   CODADR-3,*&8                                    7  0865  M W46 879            4
 133    872         BCE   INTRST,STMTS,0                                  8  0872  B |12 W56 0           5
 134    880         CHAIN 6                                                                  MACRO
 135                BCE                                                   1  0880  B           GEN      5
 136                BCE                                                   1  0881  B           GEN      5
 137                BCE                                                   1  0882  B           GEN      5
 138                BCE                                                   1  0883  B           GEN      5
 139                BCE                                                   1  0884  B           GEN      5
 140                BCE                                                   1  0885  B           GEN      5
 141         *
 142         * CLEAR FROM 0&X3 DOWN TO TOP OF CODE & X00
 143         *
 144    886  OTHER  SBR   X1,1&X1                                          7  0886  H 089 0|1            6
 145    893         MZ    X3,K999X3                                       7  0893  Y 099 W16            6
 146    900         MZ                                                    1  0900  Y                    6
 147    901         MCW                                                   1  0901  M                    6
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
148    902          MZ    X1,K999X1                                     7  0902  Y 089 W19           6
149    909          MZ                                                  1  0909  Y                   6
150    910          MCW                                                 1  0910  M                   6
151    911          C     K999X3,K999X1                                 7  0911  C W16 W19           7
152    918          BE    CLRX                                          5  0918  B 943 S             7
153    923  CLRL    CS    0&X3                                          4  0923  / 0?0               7
154    927          SBR   CLRL&3                                       4  0927  H 926               7
155    931          C     CLRL&3,K999X1                                 7  0931  C 926 W19           7
156    938          BU    CLRL                                          5  0938  B 923 /             7
157    943  CLRX    MCW   K999X1,X2                                     7  0943  M W19 094           7
158         *
159         * CLEAR FROM TOP OF CODE & X00 DOWN TO TOP OF CODE
160         *
161    950  CLRL2   C     X2,X1                                         7  0950  C 094 089           8
162    957          BE    CLRX2                                         5  0957  B 981 S             8
163    962          LCA   KB1,0&X2                                      7  0962  L X11 0!0           8
164    969          CW    0&X2                                          4  0969  ) 0!0               8
165    973          SAR   X2                                            4  0973  Q 094               8
166    977          B     CLRL2                                         4  0977  B 950               8
167         *
168         * LOAD NEXT OVERLAY
169         *
170    981  CLRX2   MN    0&X1                                          4  0981  D 0|0               8
171    985          SAR   X1                                            4  0985  Q 089               9
172    989          BSS   SNAPSH,C                                      5  0989  B 333 C             9
173    994          SBR   CLEARL&3,GMWM                                 7  0994  H 710 X58           9
174  1 001          LCA   ARITH1,PHASID                                 7  1001  L W65 110           9
175  1 008          B     LOADNX                                        4  1008  B 700               9
176         *
177         * INTERESTING STATEMENT -- ONE CONTAINING A FORMAT REFERENCE
178         *
179  1 012  INTRST  SW    CODADR-2                                      4  1012  , W47               9
180  1 016          MCW   KLESS,2&X1                                    7  1016  M W66 0|2           9
181  1 023          SBR   CHECK&6,2&X1                                 7  1023  H T55 0|2          10
182  1 030          C     0&X1  GET TO TOP                              4  1030  C 0|0              10
183  1 034          SAR   X1      OF STATEMENT BODY                     4  1034  Q 089              10
184  1 038          LCA   CODADR,0&X3  MOVE UP CODE AND ADDRESS         7  1038  L W49 0?0          10
185  1 045          LCA   GM             AND PUT A GMWM BELOW IT        4  1045  L W27              10
186  1 049          SBR   X3                                            4  1049  H 099              10
187  1 053          CW    2&X3         UNDER STATEMENT CODE             4  1053  ) 0?2              10
188  1 057          BWZ   NOFMT,CODADR-1,B                             8  1057  V U39 W48 B        11
189  1 065          BCE   RWTP,CODADR-3,1    READ TAPE                  8  1065  B /16 W46 1        11
190  1 073          BCE   RWTP,CODADR-3,3    WRITE TAPE                 8  1073  B /16 W46 3        11
191  1 081          BCE   RDPRPU,CODADR-3,L  READ                       8  1081  B V32 W46 L        11
192  1 089          BCE   RDPRPU,CODADR-3,P  PRINT                      8  1089  B V32 W46 P        12
193  1 097          BCE   RDPRPU,CODADR-3,U  PUNCH                      8  1097  B V32 W46 U        12
194  1 105          MCW   0&X1,FORMAT        READ/WRITE INPUT/OUTPUT TAPE 7  1105  M 0|0 W44          12
195  1 112          SAR   X1                                            4  1112  Q 089              12
196  1 116  RWTP    MCW   0&X1,TAPVAR  TAPE VARIABLE OR CONSTANT        7  1116  M 0|0 W38          12
197  1 123          SAR   X1                                            4  1123  Q 089              12
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  1 127          MCW   0&X1,IOLSTG  I/O LIST AND GMWM                        7  1127  M 0|0 W35           13
199  1 134          BCE   CONST,IOLSTG-1,}  TAPE NUMBER CONST WITH I/O LIST     8  1134  B T91 W34 } GMARK   13
200  1 142          BCE   CONST,TAPVAR-1,}  TAPE NUMBER CONST, NO I/O LIST     8  1142  B T91 W37 } GMARK   13
201  1 150          MN    K1,TAPCON                                            7  1150  D W67 X10           13
202  1 157          BCE   VARNOL,IOLSTG,}   TAPE NUMBER VAR, NO I/O LIST      8  1157  B U28 W35 } GMARK   13
203  1 165  RWTP2   MCW   0&X1,IOLIST                                          7  1165  M 0|0 W41           14
204  1 172          SAR   X1                                                   4  1172  Q 089               14
205  1 176  RWTP3   LCA   IOLIST,0&X3                                         7  1176  L W41 0?0           14
206  1 183          SBR   X3                                                   4  1183  H 099               14
207  1 187          LCA   FORMAT,0&X3                                         7  1187  L W44 0?0           14
208  1 194          SBR   X3                                                   4  1194  H 099               14
209  1 198          LCA   TAPCON,0&X3                                         7  1198  L X10 0?0           15
210  1 205          LCA   DOIO&3  LOAD BRANCH TO START I/O ROUTINE             4  1205  L W31               15
211  1 209          SBR   X3                                                   4  1209  H 099               15
212  1 213          BCE   GOTZON,CODADR-3,L  READ                            8  1213  B S82 W46 L         15
213  1 221          BCE   GOTZON,CODADR-3,P  PRINT                           8  1221  B S82 W46 P         15
214  1 229          BCE   GOTZON,CODADR-3,U  PUNCH                           8  1229  B S82 W46 U         15
215  1 237          BCE   GOTZON,CODADR-3,1  READ TAPE                       8  1237  B S82 W46 1         16
216  1 245          MZ    AZONE,5&X3                                           7  1245  Y W68 0?5           16
217  1 252          BCE   GOTZON,CODADR-3,3  WRITE TAPE                      8  1252  B S82 W46 3         16
218  1 260          MZ    BZONE,5&X3                                           7  1260  Y W69 0?5           16
219  1 267          BCE   GOTZON,CODADR-3,5  READ INPUT TAPE                 8  1267  B S82 W46 5         16
220  1 275          MZ    ABZONE,5&X3                                          7  1275  Y W70 0?5           17
221  1 282  GOTZON  BW    NOVAR,FLAG                                           8  1282  V T30 X57 1         17
222  1 290          BWZ   NOVAR,TAPVAR-1,2                                    8  1290  V T30 W37 2         17
223  1 298          MCW   TAPVAR,MN-3                                         7  1298  M W38 W23           17
224  1 305          MZ    KB1,MN-4  CLOBBER INTEGER ZONE TAG                   7  1305  Y X11 W22           17
225  1 312          LCA   MN,0&X3                                             7  1312  L W26 0?0           18
226  1 319          SBR   X3                                                   4  1319  H 099               18
227  1 323          MCW   KB3,TAPVAR                                         7  1323  M W73 W38           18
228  1 330  NOVAR   LCA   GM,0&X3                                            7  1330  L W27 0?0           18
229  1 337          SBR   X3                                                   4  1337  H 099               18
230  1 341          C     0&X1                                                 4  1341  C 0|0               18
231  1 345          SAR   X1                                                   4  1345  Q 089               18
232  1 349  CHECK   BCE   LOOP,0,<  LESS SIGN MEANS CODE NOT CLOBBERED YET     8  1349  B 842 000 <         19
233          *
234          * PROGRAM TOO BIG
235          *
236  1 357          CS    332                                                  4  1357  / 332               19
237  1 361          CS                                                         1  1361  /                   19
238  1 362          CC    1                                                    2  1362  F 1                 19
239  1 364          MCW   ERROR2,270                                           7  1364  M X09 270           19
240  1 371          W                                                          1  1371  2                   19
241  1 372          CC    1                                                    2  1372  F 1                 19
242  1 374          BCE   HALT,CDOVLY,1                                       8  1374  B T87 769 1         20
243  1 382          RWD   1                                                    5  1382  U %U1 R             20
244  1 387  HALT    H     HALT                                                 4  1387  . T87               20
245          *
246          * TAPE NUMBER IS A CONSTANT
247          *
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  1 391  CONST   MN    TAPVAR,TAPCON                               7  1391  D W38 X10           20
249  1 398          SW    FLAG                                        4  1398  , X57               20
250  1 402          BCE   CONST2,TAPVAR-1,}                         8  1402  B U21 W37 } GMARK   20
251  1 410          SBR   X1,2&X1                                    7  1410  H 089 0|2           21
252  1 417          B     RWTP2                                       4  1417  B /65               21
253  1 421  CONST2  SBR   X1,1&X1                                    7  1421  H 089 0|1           21
254          *
255          * TAPE IS VARIABLE, BUT THERE IS NO LIST
256          *
257  1 428  VARNOL  MCW   BOTFMT,IOLIST                              7  1428  M 154 W41           21
258  1 435          B     RWTP3                                       4  1435  B /76               21
259          *
260          * NO FORMAT
261          *
262  1 439  NOFMT   MZ    KB1,3&X3                                    7  1439  Y X11 0?3           21
263  1 446          MCW   4&X3,SEQNO                                  7  1446  M 0?4 X14           22
264  1 453          BWZ   *&5,SEQNO,2                                 8  1453  V U65 X14 2         22
265  1 461          B     *&9                                         4  1461  B U73               22
266  1 465          BWZ   NOFMTM,SEQNO-2,2                          8  1465  V U87 X12 2         22
267  1 473          MCW   SEQNO,*&4                                  7  1473  M X14 U83           22
268  1 480          MCW   0,SEQNO                                    7  1480  M 000 X14           23
269  1 487  NOFMTM  CS    332                                         4  1487  / 332               23
270  1 491          CS                                                1  1491  /                   23
271  1 492          SW    GLOBER                                      4  1492  , 184               23
272  1 496          MN    SEQNO,242                                   7  1496  D X14 242           23
273  1 503          MN                                                1  1503  D                   23
274  1 504          MN                                                1  1504  D                   23
275  1 505          MCW   ERR22                                      4  1505  M X53               24
276  1 509          W                                                 1  1509  2                   24
277  1 510          BCV   *&5                                        5  1510  B V19 @             24
278  1 515          B     *&3                                         4  1515  B V21               24
279  1 519          CC    1                                           2  1519  F 1                 24
280  1 521          MZ    *-4,CODADR-1                                7  1521  Y V23 W48           24
281  1 528          B     RWTP                                        4  1528  B /16               24
282          *
283          * READ, PRINT, PUNCH
284          *
285  1 532  RDPRPU  MCW   0&X1,FORMAT                                 7  1532  M 0|0 W44           25
286  1 539          SAR   X1                                          4  1539  Q 089               25
287  1 543          MCW   BOTFMT,IOLIST                             7  1543  M 154 W41           25
288  1 550          BCE   RDPRP2,0&X1,}                             8  1550  B V69 0|0 } GMARK   25
289  1 558          MCW   0&X1,IOLIST                               7  1558  M 0|0 W41           25
290  1 565          SAR   X1                                          4  1565  Q 089               25
291  1 569  RDPRP2  MCW   RDUNIT,TAPCON  ASSUME READ               7  1569  M X54 X10           26
292  1 576          BCE   RDPRP3,CODADR-3,L  READ                  8  1576  B W06 W46 L         26
293  1 584          MCW   PUUNIT,TAPCON  ASSUME PUNCH              7  1584  M X55 X10           26
294  1 591          BCE   RDPRP3,CODADR-3,U  PUNCH                 8  1591  B W06 W46 U         26
295  1 599          MCW   PRUNIT,TAPCON                            7  1599  M X56 X10           26
296  1 606  RDPRP3  SW    FLAG                                        4  1606  , X57               27
297  1 610          B     RWTP3                                       4  1610  B /76               27
```

```
SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
298         *
299         * DATA
300         *
301  1 616  K999X3 DSA   999                                               3  1616  999                 27
302  1 619  K999X1 DSA   999                                               3  1619  999                 27
303  1 626  MN     DCW   @DXXX0?5@                                         7  1626                      27
304  1 627  GM     DC    @}@                                               1  1627              GMARK   27
305  1 628  DOIO   B     1697  ENTRY FOR I/O ROUTINE                       4  1628  B W97               27
306  1 635  IOLSTG DCW   #4                                                4  1635                      27
307  1 638  TAPVAR DCW   #3  TAPE VARIABLE OR CONSTANT                     3  1638                      28
308  1 641  IOLIST DCW   000                                               3  1641                      28
309  1 644  FORMAT DCW   000                                               3  1644                      28
310  1 649  CODADR DCW   #5  GM, STATEMENT CODE, ADDRESS                   5  1649                      28
311  1 656  STMTS  DCW   @1356LPU@  CODES FOR STATEMENTS WITH FORMATS      7  1656                      28
312  1 665  ARITH1 DCW   @ARITH ONE@                                       9  1665                      28
313  1 666  KLESS  DCW   @<@                                               1  1666                      28
314  1 667  K1     DCW   1                                                 1  1667                      29
315  1 668  AZONE  DCW   @S@                                               1  1668                      29
316  1 669  BZONE  DCW   @K@                                               1  1669                      29
317  1 670  ABZONE DCW   @B@                                               1  1670                      29
318  1 673  KB3    DCW   #3                                                3  1673                      29
319  1 709  ERROR2 DCW   @MESSAGE 2 - OBJECT PROGRAM TOO LARGE@           36  1709                      30
320  1 710  TAPCON DCW   #1  TAPE NUMBER CONSTANT                          1  1710                      30
321  1 711  KB1    DCW   #1                                                1  1711                      30
322  1 714  SEQNO  DCW   #3                                                3  1714                      31
323  1 753  ERR22  DCW   @ERROR 22 - UNDEFINED FORMAT, STATEMENT @        39  1753                      32
324  1 754  RDUNIT DCW   @&@  READ UNIT                                    1  1754                      33
325  1 755  PUUNIT DCW   @-@  PUNCH UNIT                                  1  1755                      33
326  1 756  PRUNIT DCW   @*@  PRINT UNIT                                  1  1756                      33
327  1 757  FLAG   DCW   #1                                                1  1757                      33
328  1 758  GMWM   DCW   @}@                                               1  1758              GMARK   33
329         ORG   201                                                            0201
330    203  DSA   LOADDD    LOAD ADDRESS FOR CARD-TO-TAPE PROGRAM          3  0203  838                 34
331         EX    BEGINN                                                       B 838                     35
332         END                                                                / 000 080
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ABZONE	1670	ARITH1	1665	AZONE	1668	BEGINN	838	BOTFMT	154	BZONE	1669	CDOVLY	769
CHECK	1349	CLEARL	707	CLRL	923	CLRL2	950	CLRX	943	CLRX2	981	CODADR	1649
CONST	1391	CONST2	1421	DOIO	1628	ERR22	1753	ERROR2	1709	FLAG	1757	FORMAT	1644
GLOBER	184	GM	1627	GMWM	1758	GOTZON	1282	HALT	1387	INTRST	1012	IOLIST	1641
IOLSTG	1635	K1	1667	K999X1	1619	K999X3	1616	KB1	1711	KB3	1673	KLESS	1666
LOADDD	838	LOADNX	700	LOOP	842	MN	1626	NOFMT	1439	NOFMTM	1487	NOVAR	1330
OTHER	886	PHASID	110	PRUNIT	1756	PUUNIT	1755	RDPRP2	1569	RDPRP3	1606	RDPRPU	1532
RDUNIT	1754	RWTP	1116	RWTP2	1165	RWTP3	1176	SEQNO	1714	SNAPSH	333	STMTS	1656
TAPCON	1710	TAPVAR	1638	VARNOL	1428	X1	89	X2	94	X3	99		