```
SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR
101                JOB   FORTRAN COMPILER -- RESORT 4 PHASE -- PHASE 50A
102                CTL   6611
103         *
104         * THE STATEMENTS ARE RELOCATED TO THE POSITIONS THEY WILL OCCUPY
105         * AT OBJECT TIME.  THE STATEMENT NUMBER TABLE IS ADJUSTED TO
106         * TO SHOW THE OBJECT TIME LOCATIONS OF THE STATEMENTS.
107         *
108         * ON ENTRY X3 IS AT THE TOP OF THE MOVED-DOWN CODE.
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         TBLBOT EQU   145  ONE BELOW NUMBERS, FORMATS, I/O LISTS               0145
117         SEQTAB EQU   148  BOTTOM OF SEQUENCE NUMBER TABLE - 2                 0148
118         NSTMTS EQU   183  NUMBER OF STATEMENTS, INCLUDING GENERATED STOP      0183
119         *
120                EXT00   SNAPSH, LOADNX, CDOVLY                                                MACRO
121         SNAPSH EQU   333                                                       0333            GEN
122         PHASLD EQU   381                                                       0381            GEN
123         SNAPEX EQU   564                                                       0564            GEN
124         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                           0700            GEN
125         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE           0700            GEN
126         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                            0704            GEN
127         TPERR  EQU   728                                                       0728            GEN
128         *
129                SFX   <
130                EXT47   STUFF FROM RESORT ONE PHASE -- 47                                      MACRO
131         TOPA   EQU   841   TABBOT PLUS 3 X NUMBER OF STATEMENTS          <    0841            GEN
132         SX3A   EQU   844   USED ONLY IN PHASE 48 AND 49                  <    0844            GEN
133         TABBOT EQU   847   BOTTOM OF RESORT TABLE                       <    0847            GEN
134         NEXT   EQU   850   USED ONLY IN PHASE 49                        <    0850            GEN
135         SX2    EQU   853   USED ONLY IN PHASE 48 AND 49                  <    0853            GEN
136         SX3B   EQU   856                                                 <    0856            GEN
137         W3     EQU   859   USED ONLY IN PHASE 48 AND 49                  <    0859            GEN
138         TOPC   EQU   862   TABBOT PLUS 3 X NUMBER OF STATEMENTS PLUS 1   <    0862            GEN
139         SEQNO  EQU   865   USED ONLY IN PHASE 48 AND 49                  <    0865            GEN
140         TOPC5  EQU   870   TOPC AS FIVE DIGITS                           <    0870            GEN
141         TIMES6 EQU   875   DOCNT TIMES 6                                <    0875            GEN
142         W5     EQU   880   USED ONLY IN PHASE 49                        <    0880            GEN
143         TOPB   EQU   883   TABBOT PLUS 3 X NUMBER OF STATEMENTS PLUS 1   <    0883            GEN
144         FLAG   EQU   884   USED ONLY IN PHASE 48 AND 49                  <    0884            GEN
145         ADR5B  EQU   891                                                 <    0891            GEN
146         ADR5   EQU   896                                                 <    0896            GEN
147         CONV53 EQU   929                                                 <    0929            GEN
148         CONV35 EQU   969                                                 <    0969            GEN
149         FINDGM EQU   1052                                                <    1052            GEN
150         TOOBIG EQU   1092                                                <    1092            GEN
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

151         BEGN47  EQU   1175                                               <      1175              GEN
152         * COPE WITH SUFFIX PROBLEMS -- SFX GOES IN SIXTH CHARACTER BUT A
153         * LABEL CANNOT CONTAIN MORE THAN ONE BLANK
154         W3....  EQU   W3                                                 <      0859
155                 SFX
156         *
157         W3      EQU   W3....                                                    0859
158         *
159         PHS50A  LDPH  RESORT FOR,LOADAD,BEG50A,,,50A                                            MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]                       GEN
            *       XFR  PHASZ     PROHIBITED IN A MACRO                                            GEN
            *                                                                                       GEN
            * LOAD A BLOCK                                                                          GEN
            *                                                                                       GEN
160         )6J003  EQU   110  PHASE ID                                            0110              GEN
161         )6K003  EQU   700  LOAD NEXT PHASE                                     0700              GEN
162         )6L003  EQU   704  TAPE READ INSTRUCTION                               0704              GEN
163         )6M003  EQU   728  TAPE ERROR HANDLER                                  0728              GEN
            *                                                                                       GEN
164                 ORG   201                                                             0201
165         PHS50A  EQU   *&1                                                       0201              GEN
166                 LCA   )9J003,)6J003                                        7    0201  L 253 110   GEN      1   253     110
167                 BCE   )6K003,)6K003,1      Q: LOADING FROM CARDS?          8    0208  B 700 700 1 GEN      1   700     700
168                 BCE   )6K003,)6L003&4,0    Q: LOADING FROM AUTOCODER TAPE? 8    0216  B 700 708 0 GEN      1   700     708
169                 RTW   1,LOADAD             READ THE BLOCK                  8    0224  L %U1 /75 R GEN      1   %U1    1175
170                 BER   )6M003               Q: TAPE ERROR?                  5    0232  B 728 L     GEN      1   728
171                 CS    BEG50A,)9R003        ENTER THE BLOCK                 7    0237  / /75 258   GEN      2  1175     258
172         )9J003  DCW   @RESORT FOR@          PHASE ID                       10    0253              GEN      2
173                 DC    #1                                                 1    0254              GEN      2
174                 DC    @50A@          PHASE NUMBER                        3    0257              GEN      2
175         )9R003  DCW   @}@                                                1    0258              GEN      2
176                 XFR   PHS50A                                                   B 201             3   201
177         *
178                 ORG   BEGN47                                                   1175
179         LOADAD  EQU   *&1                                                1175
180   1 175 BEG50A  MCW   SEQTAB,X1                                          7    1175  M 148 089           4   148     089
181   1 182         SBR   X1,1&X1                                            7    1182  H 089 0|1           4   089     001+1
182   1 189         C     TBLBOT,X1                                          7    1189  C 145 089           4   145     089
183   1 196         BE    ATBOT                                              5    1196  B S60 S             4  1260
184   1 201 LOOP    SBR   X1,3&X1                                            7    1201  H 089 0|3           4   089     003+1
185   1 208         MCW   0&X1,X2                                           7    1208  M 0|0 094           5   000+1   094
186   1 215         BWZ   *&12,X2-1,2                                       8    1215  V S34 093 2         5  1234     093
187   1 223         MCW   0&X2,0&X1                                         7    1223  M 0!0 0|0           5   000+2   000+1
188   1 230         B     TSTBOT                                             4    1230  B S48               5  1248
189   1 234         MA    W3,X2                                              7    1234  # 859 094           5   859     094
190   1 241         MCW   X2,0&X1                                           7    1241  M 094 0|0           6   094     000+1
191   1 248 TSTBOT  C     X1,TBLBOT                                          7    1248  C 089 145           6   089     145
192   1 255         BU    LOOP                                               5    1255  B S01 /             6  1201
193   1 260 ATBOT   MCW   W3,X1                                              7    1260  M 859 089           6   859     089
194   1 267         MA    X3,X1                                              7    1267  # 099 089           6   099     089
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195  1 274         MCW   X1,NEWX3&6                                        7  1274  M 089 U69           7   089    1469
196  1 281         SBR   ADR5 <,0&X3                                      7  1281  H 896 0?0           7   896     000+3
197  1 288         B     CONV35                                            4  1288  B 969               7   969
198  1 292         MCW   ADR5B<,TOPC5<                                    7  1292  M 891 870           7   891     870
199  1 299         MCW   ADR5B<,W5                                        7  1299  M 891 W54           7   891    1654
200  1 306         MCW   W3,ADR5 <                                        7  1306  M 859 896           7   859     896
201  1 313         B     CONV35                                            4  1313  B 969               8   969
202  1 317         A     ADR5B<,TOPC5<                                    7  1317  A 891 870           8   891     870
203  1 324         C     K16000,TOPC5<                                    7  1324  C W49 870           8  1649     870
204  1 331         BL    *&8                                              5  1331  B T43 T             8  1343
205  1 336         S     K16000,TOPC5<                                    7  1336  S W49 870           8  1649     870
206  1 343         MCW   SEQTAB,ADR5 <                                    7  1343  M 148 896           8   148     896
207  1 350         B     CONV35                                            4  1350  B 969               9   969
208  1 354         C     ADR5B<,TOPC5<                                    7  1354  C 891 870           9   891     870
209  1 361         BH    TOOBIG                                           5  1361  B |92 U             9  1092
210  1 366         MZ    X1,TSTZON&7                                      7  1366  Y 089 V63           9   089    1563
211  1 373         MCW   X1-2,TSTCHR&7                                    7  1373  M 087 V83           9   087    1583
212  1 380         MCW   NSTMTS,X2                                        7  1380  M 183 094           9   183     094
213  1 387         MA    W3,NSTMTS                                        7  1387  # 859 183          10   859     183
214  1 394         C     TOPC5<,W5                                        7  1394  C 870 W54          10   870    1654
215  1 401         BH    FINDW2                                           5  1401  B V00 U            10  1500
216  1 406  MORE   LCA   0&X3,0&X1                                       7  1406  L 0?0 0|0          10   000+3   000+1
217  1 413         SAR   X3                                               4  1413  Q 099              10   099
218  1 417         C     0&X1                                             4  1417  C 0|0              10   000+1
219  1 421         SAR   X1                                               4  1421  Q 089              10   089
220  1 425         BCE   *&5,0&X3,:  AT TOP OF MOVED-UP CODE              8  1425  B U37 0?0 :        11  1437     000+3
221  1 433         B     MORE                                             4  1433  B U06              11  1406
222         *
223         * DONE
224         *
225  1 437  CSLOOP CS    0&X1                                             4  1437  / 0|0              11   000+1
226  1 441         SBR   X1                                               4  1441  H 089              11   089
227  1 445         C     X1,BOTCLR  AT THE BOTTOM OF CORE TO CLEAR?       7  1445  C 089 W57          11   089    1657
228  1 452         BU    CSLOOP     NO, CLEAR MORE                        5  1452  B U37 /            11  1437
229  1 457         CW    0&X1                                             4  1457  ) 0|0              11   000+1
230  1 461         CW                                                     1  1461  )                  12
231  1 462         CW                                                     1  1462  )                  12
232  1 463  NEWX3  SBR   X3,0                                            7  1463  H 099 000          12   099     000
233  1 470         SW    0&X1,1&X3                                        7  1470  , 0|0 0?1          12   000+1   001+3
234  1 477         MCW   W3,X2                                            7  1477  M 859 094          12   859     094
235  1 484         BSS   SNAPSH,D                                        5  1484  B 333 D            12   333
236  1 503         B     LOADNX                                           4  1489  B 700              12   700
237         *
238         * MOVE THE CODE TO ITS FINAL PLACE
239         *
240  1 507  FINDWM MA    A001,X2  WHY NOT  SBR  X2,1&X2 ???      V3M4    7  1493  # W67 094          13  1667     094
241  1 514  FINDW2 BW    *&5,1&X2                                         8  1500  V V12 0!1 1        13  1512     001+2
242  1 522         B     FINDWM                                           4  1508  B U93              13  1493
243  1 526         MCW   X2,X1                                            7  1512  M 094 089          13   094     089
244  1 533         MA    W3,X1                                            7  1519  # 859 089          13   859     089
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

245  1 540          LCA   0&X2,0&X1  MOVE ONE FIELD TO ITS FINAL PLACE          7  1526  L 0!0 0|0          14   000+2   000+1
246  1 547          C     X2,X3                                                7  1533  C 094 099          14   094     099
247  1 554          BU    FINDWM                                               5  1540  B U93 /            14  1493
248  1 559          LCA   KB2,2&X3                                            7  1545  L W60 0?2          14  1660     002+3
249  1 566          CW    1&X3                                                 4  1552  ) 0?1              14   001+3
250  1 570  TSTZON  BWZ   TSTCHR,X3,2  CLEAR MOVED-AWAY CODE                   8  1556  V V76 099 2        14  1576     099
251  1 578          CS    0&X3                                                 4  1564  / 0?0              15   000+3
252  1 582          SBR   X3                                                   4  1568  H 099              15   099
253  1 586          B     TSTZON                                               4  1572  B V56              15  1556
254  1 590  TSTCHR  BCE   CLR00F,X3-2,0                                       8  1576  B V96 097 0        15  1596     097
255  1 598          CS    0&X3                                                 4  1584  / 0?0              15   000+3
256  1 602          SBR   X3                                                   4  1588  H 099              15   099
257  1 606          B     TSTCHR                                               4  1592  B V76              15  1576
258  1 610  CLR00F  C     X3,X1                                                7  1596  C 099 089          16   099     089
259  1 617          BE    CLRFIN                                               5  1603  B W27 S            16  1627
260  1 622          LCA   KB1,0&X3                                            7  1608  L W61 0?0          16  1661     000+3
261  1 629          CW    0&X3                                                 4  1615  ) 0?0              16   000+3
262  1 633          SBR   X3                                                   4  1619  H 099              16   099
263  1 637          B     CLR00F                                               4  1623  B V96              16  1596
264  1 641  CLRFIN  MCW   NSTMTS,X1                                           7  1627  M 183 089          16   183     089
265  1 648          MA    K15999,X1                                            7  1634  # W64 089          17  1664     089
266  1 655          B     CSLOOP                                               4  1641  B U37              17  1437
267          *
268          * DATA
269          *
270  1 663  K16000  DCW   16000                                               5  1649                     17
271  1 668  W5      DCW   #5                                                   5  1654                     17
272  1 671  BOTCLR  DSA   DOWNTO  TEST FOR BOTTOM OF CLEARING                  3  1657  W99                17  1699
273  1 681  KP1     DCW   &1                                                   1  1658                     17
274  1 683  KB2     DCW   #2                                                   2  1660                     17
275  1 684  KB1     DCW   #1                                                   1  1661                     18
276  1 687  K15999  DSA   15999                                               3  1664  I9I                18 15999
277  1 690  A001    DSA   1                                          V3M4     3  1667  001                18   001
278  1 691  GMWM    DCW   @}@                                                 1  1668            GMARK   18
279                ORG   *&X00                                                     1700
280          DOWNTO  EQU   *                                                  1699
281                XFR   BEG50A                                                    B /75              19  1175
282          CLRME   CLRA  LOADAD,GMWM                                                        MACRO
             *       CLRA  CLRBOT,CLRTOP[,ORG,GMWMAD]                                         GEN
             *                                                                                GEN
             * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                              GEN
             *                                                                                GEN
283                ORG   201                                                       0201
             *                                                                          GEN
             * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                GEN
             *                                                                          GEN
284          CLRME   EQU   *&1                                                1  0201            GEN
285          )0J004  CS    GMWM         CLEAR FROM CLRTOP                     4  0201  / W68       GEN     20  1668
286                SBR   )0J004&3                                             4  0205  H 204       GEN     20   204
287                SBR   )0L004&6                                             4  0209  H 250       GEN     20   250
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

288                 C     )0J004&3,)0M004   DOWN TO CLRBOT & X00?        7  0213  C 204 261   GEN     20   204     261
289                 BU    )0J004                                        5  0220  B 201 /     GEN     20   201
            *                                                                                 GEN
            * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                          GEN
            *                                                                                 GEN
290         )0K004  C     )0L004&6,)0N004                               7  0225  C 250 264   GEN     20   250     264
291                 BU    )0L004                                        5  0232  B 244 /     GEN     20   244
292                 CS    LOADNX,)0Q004  LOAD THE NEXT BLOCK AT 1       7  0237  / 700 271   GEN     21   700     271
293         )0L004  LCA   )0P004,0-0     CLEAR WITH BLANK AND WORD MARK 7  0244  L 265 000   GEN     21   265     000
294                 SBR   )0L004&6                                      4  0251  H 250       GEN     21   250
295                 B     )0K004                                        4  0255  B 225       GEN     21   225
296         )0M004  DSA   )0R004         CLRBOT & X00 - 1              3  0261  /99         GEN     21  1199
297         )0N004  DSA   LOADAD         CLRBOT                        3  0264  /75         GEN     21  1175
298         )0P004  DCW   #1                                           1  0265              GEN     21
299                 DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP 5  0270              GEN     21
300         )0Q004  DCW   @}@                                          1  0271              GEN     22
301                 ORG   LOADAD&X00                                          1200
302         )0R004  EQU   *           CLRBOT & X00 - 1                    1199              GEN
303                 XFR   CLRME                                                 B 201               23   201
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J004	0201: 0	)0K004	0225: 0	)0L004	0244: 0	)0M004	0261: 0	)0N004	0264: 0	)0P004	0265: 0
)0Q004	0271: 0	)0R004	1199: 0	)6J003	0110: 0	)6K003	0700: 0	)6L003	0704: 0	)6M003	0728: 0
)9J003	0253: 0	)9R003	0258: 0	A001	1667: 0	ADR5 <	0896: 0	ADR5B<	0891: 0	ATBOT	1260: 0
BEG50A	1175: 0	BEGN47	1175: 0	BOTCLR	1657: 0	CDOVLY	0700: 0	CLR00F	1596: 0	CLRFIN	1627: 0
CLRME	0201: 0	CONV35	0969: 0	CONV53	0929: 0	CSLOOP	1437: 0	DOWNTO	1699: 0	FINDGM	1052: 0
FINDW2	1500: 0	FINDWM	1493: 0	FLAG <	0884: 0	GMWM	1668: 0	K15999	1664: 0	K16000	1649: 0
KB1	1661: 0	KB2	1660: 0	KP1	1658: 0	LOADAD	1175: 0	LOADNX	0700: 0	LOOP	1201: 0
MORE	1406: 0	NEWX3	1463: 0	NEXT <	0850: 0	NSTMTS	0183: 0	PHASLD	0381: 0	PHS50A	0201: 0
SEQNO<	0865: 0	SEQTAB	0148: 0	SNAPEX	0564: 0	SNAPSH	0333: 0	SX2 <	0853: 0	SX3A <	0844: 0
SX3B <	0856: 0	TABBOT	0847: 0	TBLBOT	0145: 0	TIMES6	0875: 0	TOOBIG	1092: 0	TOPA <	0841: 0
TOPB <	0883: 0	TOPC <	0862: 0	TOPC5<	0870: 0	TPERR	0728: 0	TPREAD	0704: 0	TSTBOT	1248: 0
TSTCHR	1576: 0	TSTZON	1556: 0	W3	0859: 0	W3 <	0859: 0	W3....	0859: 0	W5	1654: 0
W5 <	0880: 0	X1	0089: 0	X2	0094: 0	X3	0099: 0				

UNREFERENCED SYMBOLS

CDOVLY CONV53 FINDGM FLAG < KP1 NEXT < PHASLD SEQNO< SNAPEX SX2 < SX3A < SX3B < TABBOT TIMES6 TOPA < TOPB < TOPC < TPERR TPREAD W5 <