```
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
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
101         000    JOB   1401 AUTOCODER-PASS 7-LIST,CONDNS-INITL 1 -VERSION 3
102                CTL   630 1
103         *
104         * EQUATERS USED BY THE PROGRAM
105         *
106         INITAP EQU   %U0                                                 %U0
107         SYSTAP EQU   %U1                                                 %U1
108         ORIGTP EQU   %U4                                                 %U4
109         WORKTP EQU   %U5                                                 %U5
110         XTRATP EQU   %U6                                                 %U6
111         FIXFRM EQU   0                                                   0000
112         STLABL EQU   FIXFRM&2                                            0002
113         STSTMT EQU   FIXFRM&5                                            0005
114         COUNT  EQU   FIXFRM&7                                            0007
115         ORGADD EQU   FIXFRM&32                                           0032
116         LABADD EQU   FIXFRM&61                                           0061
117         SUPADD EQU   FIXFRM&66                                           0066
118         OP     EQU   FIXFRM&67                                           0067
119         AOP    EQU   FIXFRM&70                                           0070
120         BOP    EQU   FIXFRM&73                                           0073
121         DMOD   EQU   FIXFRM&74                                           0074
122         TYPE   EQU   FIXFRM&75                                           0075
123         ALTER  EQU   FIXFRM&80                                           0080
124         XXXX   EQU   0                                                   0000
125         PRINT  EQU   200                                                 0200
126         ALT    EQU   PRINT&4                                             0204
127         PG     EQU   PRINT&7                                             0207
128         LIN    EQU   PRINT&11                                            0211
129         LAB    EQU   PRINT&19                                            0219
130         OPCODE EQU   PRINT&25                                            0225
131         OPRAND EQU   PRINT&78                                            0278
132         SUFFIX EQU   PRINT&80                                            0280
133         CT     EQU   PRINT&84                                            0284
134         LOCN   EQU   PRINT&90                                            0290
135         INOP   EQU   PRINT&93                                            0293
136         INAOP  EQU   PRINT&97                                            0297
137         INBOP  EQU   PRINT&101                                           0301
138         INDMOD EQU   PRINT&103                                           0303
139         KIND   EQU   PRINT&109                                           0309
140         CARDNO EQU   PRINT&114                                           0314
141         PUNCH  EQU   100                                                 0100
142         LIBRN  EQU   0                                                   0000
143         ZONE   EQU   189                                                 0189
144         XR1    EQU   89                                                  0089
145         XR2    EQU   94                                                  0094
146         XR3    EQU   99                                                  0099
147         *
```



```
SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
148         * INITIALIZATION ROUTINE
149         *
150                ORG   1900                                                    1900
151         SSOP   DCW   @B@                                             1  1900                    4
152                CS    332                                             4  1901  / 332             4
153                CS                                                    1  1905  /                 4
154                CS                                                    1  1906  /                 4
155                CS                                                    1  1907  /                 4
156                RTW   SYSTAP,400                                      8  1908  L %U1 400 R       4
157                NOP   XXXX                                            4  1916  N 000             4
158                BER   TPERRI                                          5  1920  B M03 L           5
159                CW    ENDIN2,LSTOP1                                   7  1925  ) X99 O93         5
160                SW    ENDIN                                           4  1932  , I98             5
161                LCA   ENDIN,333                                       7  1936  L I98 333         5
162                LCA   ENDIN,181                                       7  1943  L I98 181         5
163                MCW   SSOP,TSTSIZ                                     7  1950  M Z00 407         5
164                MCW   SSOP,SSAVE1                                     7  1957  M Z00 O91         6
165                CW    ENDIN                                           4  1964  ) I98             6
166                RWD   ORIGTP                                          5  1968  U %U4 R           6
167                RWD   WORKTP                                          5  1973  U %U5 R           6
168                RWD   XTRATP                                          5  1978  U %U6 R           6
169                SW    PUNCH&72,PUNCH&76                               7  1983  , 172 176         6
170                A     &1,PUNCH&75                                     7  1990  A O96 175         7
171                B     READ4                                           4  1997  B T15             7
172         *
173         * CHECK FOR JOB CARD
174         *
175                C     MNEMON-2,@JOB@                                  7  2001  C H48 O99         7
176                BU    CKCTL                                           5  2008  B !78 /           7
177                CW    JOBSW#1                                         4  2013  ) P00             7
178                RT    WORKTP,180                                      8  2017  M %U5 180 R       7
179                LCA   333,181                                         7  2025  L 333 181         8
180                MCW   OPERND,JOBSAV                                   7  2032  M I02 O85         8
181                MCW   IMAGE&80,PUNCH&80                               7  2039  M I10 180         8
182                MCW   ALTNO,JOBALT#4                                  7  2046  M I14 P04         8
183                MCW   PAGENO,JOBPAG#2                                 7  2053  M H32 P06         8
184                MCW   LINENO,JOBLIN#3                                 7  2060  M H35 P09         9
185                MCW   LABEL,JOBLAB#6                                  7  2067  M H41 P15         9
186                B     READ4                                           4  2074  B T15             9
187         *
188         * CHECK FOR CONTROL CARD
189         *
190         CKCTL  C     MNEMON-2,@CTL@                                  7  2078  C H48 P18         9
191                BU    TSTSIZ                                          5  2085  B 407 /           9
192                CW    CTLSW#1                                         4  2090  ) P19             9
193                MCW   IMAGE&30,CTLSAV#10                              7  2094  M H60 P29        10
194                MCW   ALTNO,CTLALT#4                                  7  2101  M I14 P33        10
195                MCW   PAGENO,CTLPAG#2                                 7  2108  M H32 P35        10
196                MCW   LINENO,CTLLIN#3                                 7  2115  M H35 P38        10
197                B     READ4                                           4  2122  B T15            10
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

198         *
199         * TEST OUTPUT OPTIONS DESIRED
200         *
201         CHKOP   BCE   OPNTAP,LSTAPE,1                               8  2126  B K14 P24 1         11
202         TSTOP   BCE   TSTSIZ,OUTOPN,0                               8  2134  B 407 P22 0         11
203                 BCE   CONDOP,OUTOPN,1                               8  2142  B 400 P22 1         11
204                 BCE   TSTSIZ,OUTOPN,2                               8  2150  B 407 P22 2         11
205                 BCE   CONDOP,OUTOPN,3                               8  2158  B 400 P22 3         12
206                 BCE   TSTSIZ,OUTOPN,4                               8  2166  B 407 P22 4         12
207                 BCE   CONDOP,OUTOPN,5                               8  2174  B 400 P22 5         12
208                 BCE   TSTSIZ,OUTOPN,6                               8  2182  B 407 P22 6         12
209                 BCE   CONDOP,OUTOPN,7                               8  2190  B 400 P22 7         13
210                 BCE   TSTSIZ,OUTOPN,                                8  2198  B 407 P22           13
211                 CW    CTLSW1#1                                      4  2206  ) P39               13
212                 B     TSTSIZ                                        4  2210  B 407               13
213         OPNTAP  CW    TAPOP1                                        4  2214  ) O92               13
214                 B     TSTOP                                         4  2218  B J34               13
215         *
216         * SETUP & GET MAIN PROGRAM
217         *
218         GETMAN  BSP   ORIGTP                                        5  2222  U %U4 B             13
219                 SW    FIXFRM&1,FIXFRM&6                             7  2227  , 001 006           14
220                 SW    FIXFRM&8,FIXFRM&14                            7  2234  , 008 014           14
221                 SW    FIXFRM&23,FIXFRM&57                           7  2241  , 023 057           14
222                 SW    FIXFRM&62,FIXFRM&67                           7  2248  , 062 067           14
223                 SW    FIXFRM&68,FIXFRM&71                           7  2255  , 068 071           14
224                 SW    FIXFRM&74                                     4  2262  , 074               14
225                 CW    181,333                                       7  2266  ) 181 333           15
226                 MCW   KBLK1,HOLDA1-1                                7  2273  M O27 O23           15
227                 LCA   @L0     ,      ,      ,      1   @,PUNCH&71   7  2280  L P71 171           15
228                 LCA   @2SKB@,ZONE                                   7  2287  L P75 189           15
229                 LCA   @00000@,XR3&2                                 7  2294  L P80 101           15
230                 LCA   XR3&2                                         4  2301  L 101               15
231                 LCA                                                 1  2305  L                   16
232                 SW    GRPMK3                                        4  2306  , O95               16
233                 BCE   SETOUT,CNDSW1,1                               8  2310  B L49 O33 1         16
234                 BW    *&5,LSTOP1                                    8  2318  V L30 O93 1         16
235                 B     SETOUT                                        4  2326  B L49               16
236                 BW    *&5,TAPOP1                                    8  2330  V L42 O92 1         16
237                 B     SETOUT                                        4  2338  B L49               16
238                 MCW   @1@,NOOUT1                                    7  2342  M P81 O94           17
239         SETOUT  MCW   OUTOPN,OPNSV1                                 7  2349  M P22 O90           17
240                 WTW   XTRATP,SAVCN1                                 8  2356  L %U6 O21 W         17
241                 NOP   XXXX                                          4  2364  N 000               17
242                 BER   TPERRI                                        5  2368  B M03 L             17
243                 RWD   XTRATP                                        5  2373  U %U6 R             17
244                 CW    GRPMK3                                        4  2378  ) O95               18
245                 RTW   SYSTAP,201                                    8  2382  L %U1 201 R         18
246                 NOP   XXXX                                          4  2390  N 000               18
247                 BER   TPERRI                                        5  2394  B M03 L             18
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

248                 B     INIT2                                         4  2399  B 201               18
249         *
250         * TAPE REDUNDANCY ROUTINE
251         *
252         TPERRI  SBR   XR2                                           4  2403  H O94               18
253                 SBR   REDXI&3                                       4  2407  H M75               18
254                 MZ    &9,XR2                                        7  2411  Y P82 O94           19
255                 MCW   4000-10&X2,TPINSI&7                           7  2418  M IR0 M66           19
256                 MN    TPINSI&3,BSPI&3                               7  2425  D M62 M42           19
257                 MCW   TPINSI&7,INST2I&7                             7  2432  M M66 N75           19
258         BSPI    BSP   INITAP                                        5  2439  U %U0 B             19
259                 BCE   WRTRDI,TPINSI&7,W                             8  2444  B N48 M66 W         20
260                 MCW   &9,READCI#1                                   7  2452  M P82 P83           20
261         TPINSI  RT    INITAP,XXXX                                   8  2459  M %U0 000 R         20
262                 BER   RDRERI                                        5  2467  B M76 L             20
263         REDXI   B     XXXX                                          4  2472  B 000               20
264         RDRERI  MN    TPINSI&3,BSP2I&3                              7  2476  D M62 M86           20
265         BSP2I   BSP   INITAP                                        5  2483  U %U0 B             21
266                 S     &1,READCI                                     7  2488  S O96 P83           21
267                 BWZ   TPINSI,READCI,B                               8  2495  V M59 P83 B         21
268                 MN    TPINSI&3,TPHALI&6                             7  2503  D M62 N16           21
269         TPHALI  H     XXXX,790                                      7  2510  . 000 790           21
270                 MCW   TPINSI&7,*&8                                  7  2517  M M66 N31           22
271                 RT    INITAP,XXXX                                   8  2524  M %U0 000 R         22
272                 BSS   BSPI,E                                        5  2532  B M39 E             22
273                 H     XXXX,711                                      7  2537  . 000 711           22
274                 B     REDXI                                         4  2544  B M72               22
275         WRTRDI  SKP   SYSTAP                                        5  2548  U %U1 E             22
276                 BCE   SUBCTI,WRTCTI-1,5                             8  2553  B N85 P84 5         23
277                 A     &1,WRTCTI#2                                   7  2561  A O96 P85           23
278         INST2I  WT    INITAP,XXXX                                   8  2568  M %U0 000 W         23
279                 BER   BSPI                                          5  2576  B M39 L             23
280                 B     REDXI                                         4  2581  B M72               23
281         SUBCTI  S     WRTCTI                                        4  2585  S P85               23
282                 MN    TPINSI&3,*&7                                  7  2589  D M62 O02           24
283                 H     XXXX,760                                      7  2596  . 000 760           24
284                 B     INST2I                                        4  2603  B N68               24
285         CLRLEG  DCW   @CLEAR STORAGE @                             14  2620                      24
286         HOLDA1  DCW   &0000                                         4  2624                      24
287         KBLK1   DCW   @080@                                         3  2627                      24
288         CORSIZ  DCW   @ 3999@                                       5  2632                      25
289         CNDSW1  DCW   @0@                                           1  2633                      25
290         JOBSAV  DCW   #52                                          52  2685                      27
291         ERRCT1  DCW   @0000@                                        4  2689                      27
292         OPNSV1  DCW   @ @                                           1  2690                      27
293         SSAVE1  DCW   @ @                                           1  2691                      27
294         TAPOP1  DCW   @ @                                           1  2692                      27
295         LSTOP1  DCW   @ @                                           1  2693                      28
296         NOOUT1  DCW   @ @                                           1  2694                      28
297         GRPMK3  DC    @}@                                           1  2695            GMARK     28
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

298         SAVCN1 EQU   HOLDA1-3                                                2621
299                LTORG *                                                          2696
                   DCW   &1                                                  1  2696              LIT     28
                   DCW   @JOB@                                               3  2699              LIT     28
           JOBSW   DCW   #01                                                 1  2700              AREA    28
           JOBALT  DCW   #04                                                 4  2704              AREA    28
           JOBPAG  DCW   #02                                                 2  2706              AREA    28
           JOBLIN  DCW   #03                                                 3  2709              AREA    29
           JOBLAB  DCW   #06                                                 6  2715              AREA    29
                   DCW   @CTL@                                               3  2718              LIT     29
           CTLSW   DCW   #01                                                 1  2719              AREA    29
           CTLSAV  DCW   #10                                                10  2729              AREA    29
           CTLALT  DCW   #04                                                 4  2733              AREA    29
           CTLPAG  DCW   #02                                                 2  2735              AREA    29
           CTLLIN  DCW   #03                                                 3  2738              AREA    30
           CTLSW1  DCW   #01                                                 1  2739              AREA    30
                   DCW   @L0    ,     ,     ,     1   @                     32  2771              LIT     30
                   DCW   @2SKB@                                              4  2775              LIT     31
                   DCW   @00000@                                             5  2780              LIT     31
                   DCW   @1@                                                 1  2781              LIT     31
                   DCW   &9                                                  1  2782              LIT     31
           READCI  DCW   #01                                                 1  2783              AREA    31
           WRTCTI  DCW   #02                                                 2  2785              AREA    31
300                ORG   3831                                                       3831
301         INPUT4 DA    1X86                                                 3831  3916
302         PAGENO       1,2                                                  3832              FIELD
303         LINENO       3,5                                                  3835              FIELD
304         LABEL        6,11                                                 3841              FIELD
305         MNEMON       16,20                                                3850              FIELD
306         OPERND       21,72                                                3902              FIELD
307         ALTNO        81,84                                                3914              FIELD
308         IMAGE  EQU   INPUT4-1                                             3830
309         FIXINP EQU   IMAGE&87&X3                                          3917 X
310         INPUT5 EQU   FIXINP&1&X0                                          3918
311         PROSIZ EQU   CTLSAV-9                                             2720
312         OBJSIZ EQU   CTLSAV-8                                             2721
313         OUTOPN EQU   CTLSAV-7                                             2722
314         LSTAPE EQU   CTLSAV-5                                             2724
315         ENDIN  EQU   3998                                                 3998
316         3998   DCW   @}@                                                  3998              GMARK   33
317                XFR   LIBRN                                                      B 000               34
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

318                JOB   1401 AUTOCODER-PASS 7-LIST,CONDNS-INITL 2 -VERSION 3
319                ORG   400                                                        0400
320         *
321         * CONDENSE OPTION
322         *
323         CONDOP MCW   @1@,CNDSW1                                           7  0400  M T64 O33           37
324         *
325         * TEST OBJECT MACHINE SIZE
326         *
327         TSTSIZ BSS   SENSW,F                                              5  0407  B /03 F             37
328                BW    *&3,LSTOP1                                           8  0412  V 422 O93 1         37
329                CC    1                                                    2  0420  F 1                 37
330                MCW   @1@,PRINT&15                                         7  0422  M T64 215           37
331                MCW   CLRLEG                                               4  0429  M O20               37
332                MCW   @1@,200                                              7  0433  M T64 200           38
333                BW    IS4K,CTLSW                                           8  0440  V 544 P19 1         38
334                C     OBJSIZ,@3@                                           7  0448  C P21 T65           38
335                BL    OVER4K                                               5  0455  B 464 T             38
336                B     IS4K                                                 4  0460  B 544               38
337         OVER4K C     OBJSIZ,@6@                                           7  0464  C P21 T66           38
338                BL    BADCTL                                               5  0471  B 540 T             39
339                MCW   @,053053N000000N00001026@,PUNCH&52                   7  0476  M T89 152           39
340                LCA   @,008015,022026,030037,044,049@                      4  0483  L U18               39
341                MCW   PUNCH&52,PRINT&72                                    7  0487  M 152 272           39
342                B     PRTPNH                                               4  0494  B S17               39
343                MCW   @1,001/001117I0?@,PUNCH&71                           7  0498  M U33 171           39
344                MCW   @#071029C029056B026/B001/099@                        4  0505  M U60               39
345                LCA   @L068116,105106,110117B101/I9I@                      4  0509  L U89               40
346                BCE   IS8K,OBJSIZ,4                                        8  0513  B 651 P21 4         40
347                BCE   IS12K,OBJSIZ,5                                       8  0521  B 669 P21 5         40
348                MCW   @15@,CORSIZ-3                                        7  0529  M U91 O29           40
349                B     CLRST2                                               4  0536  B 683               40
350         BADCTL CW    CTLSW1                                               4  0540  ) P39               40
351         IS4K   MCW   @,05705710260@,PUNCH&44                             7  0544  M V02 144           41
352                LCA   @,008015,019026,030,034041,045,053@                  4  0551  L V35               41
353                MCW   PUNCH&44,PRINT&64                                    7  0555  M 144 264           41
354                B     PRTPNH                                               4  0562  B S17               41
355                MCW   @B0010270B0261,001/001113I0@,PUNCH&70                7  0566  M V61 170           41
356                LCA   @L068112,102106,113/101099/I99,027A070028)027@       4  0573  L W05               41
357                BCE   CLRST2,OBJSIZ,3                                      8  0577  B 683 P21 3         42
358                MZ    @S@,PUNCH&27                                         7  0585  Y W06 127           42
359                MCW   @1@,CORSIZ-3                                         7  0592  M T64 O29           42
360                BCE   CLRST2,OBJSIZ,2                                      8  0599  B 683 P21 2         42
361                MCW   @T@,PUNCH&27                                         7  0607  M W07 127           42
362                MCW   @3@,CORSIZ-2                                         7  0614  M T65 O30           43
363                BCE   CLRST2,OBJSIZ,1                                      8  0621  B 683 P21 1         43
364                CW    CTLSW1                                               4  0629  ) P39               43
365                MCW   @I@,PUNCH&27                                         7  0633  M W08 127           43
366                MCW   @39@,CORSIZ-2                                        7  0640  M W10 O30           43
367                B     CLRST2                                               4  0647  B 683               43
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

368         IS8K    MZ    @S@,PUNCH&29                                        7  0651  Y W06 129           44
369                 MCW   @7@,CORSIZ-3                                        7  0658  M W11 O29           44
370                 B     CLRST2                                              4  0665  B 683               44
371         IS12K   MZ    @K@,PUNCH&29                                        7  0669  Y W12 129           44
372                 MCW   @11@,CORSIZ-3                                       7  0676  M W14 O29           44
373         CLRST2  MCW   PUNCH&71,PRINT&91                                   7  0683  M 171 291           44
374                 MCW   @2@,PRINT&15                                        7  0690  M W15 215           45
375                 MCW   CLRLEG                                              4  0697  M O20               45
376                 B     PRTPNH                                              4  0701  B S17               45
377                 MCW   @,00100110400@,PUNCH&71                             7  0705  M W26 171           45
378                 MCW   @,061068,072/061039@,PUNCH&46                       7  0712  M W44 146           45
379                 LCA   @,008015,022029,036040,047054@                      4  0719  L W72               45
380                 MCW   PUNCH&71,PRINT&91                                   7  0723  M 171 291           46
381                 MCW   @BOOTSTRAP@,PRINT&9                                 7  0730  M W81 209           46
382                 B     PRTPNH                                              4  0737  B S17               46
383                 BW    *&3,LSTOP1                                          8  0741  V 751 O93 1         46
384                 CC    K                                                   2  0749  F K                 46
385                 BW    DOHEAD,CTLSW                                        8  0751  V 818 P19 1         46
386         *
387         * TEST PROCESSOR MACHINE SIZE
388         *
389                 C     PROSIZ,@3@                                          7  0759  C P20 T65           47
390                 BE    DOHEAD                                              5  0766  B 818 S             47
391                 BH    BADPRO                                              5  0771  B 814 U             47
392                 C     PROSIZ,@6@                                          7  0776  C P20 T66           47
393                 BL    BADPRO                                              5  0783  B 814 T             47
394                 MCW   @4000,KBLK1                                         7  0788  M W84 O27           47
395                 BCE   DOHEAD,PROSIZ,4                                     8  0795  B 818 P20 4         48
396                 A     @4000,KBLK1                                         7  0803  A W84 O27           48
397                 B     DOHEAD                                              4  0810  B 818               48
398         BADPRO  CW    CTLSW1                                              4  0814  ) P39               48
399         *
400         * PRINT HEADING, JOB & CONTROL CARDS
401         *
402         DOHEAD  MCW   @1@,PRINT&114                                       7  0818  M T64 314           48
403                 MCW   @PAGE@,PRINT&109                                    7  0825  M W88 309           48
404                 MCW   JOBSAV,OPRAND                                       7  0832  M O85 278           49
405                 MCW   PUNCH&80,LOCN                                       7  0839  M 180 290           49
406                 MCW   @0@,200                                             7  0846  M W89 200           49
407                 B     PRINT2                                              4  0853  B '61               49
408                 BW    *&3,LSTOP1                                          8  0857  V 867 O93 1         49
409                 CC    K                                                   2  0865  F K                 49
410                 CS    PRINT&78                                            4  0867  / 278               49
411                 MCW   @SFX CT  LOCN  INSTRUCTION TYPE  CARD@,PRINT&114    7  0871  M X25 314           50
412                 MCW   @SEQ PG LIN  LABEL  OP    OPERANDS@,PRINT&34        7  0878  M X58 234           50
413                 MCW   @0@,200                                             7  0885  M W89 200           50
414                 B     PRINT2                                              4  0892  B '61               50
415                 CS    PRINT&132                                           4  0896  / 332               50
416                 CS                                                        1  0900  /                   50
417                 B     PRINT2                                              4  0901  B '61               50
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

418                 BW    TSTCTL,JOBSW                                        8  0905  V 970 P00 1         51
419                 MCS   JOBALT,ALT                                          7  0913  Z P04 204           51
420                 MCS   JOBPAG,PG                                           7  0920  Z P06 207           51
421                 MZ    JOBPAG,PG                                           7  0927  Y P06 207           51
422                 MCW   JOBLIN,LIN                                          7  0934  M P09 211           51
423                 MCW   JOBLAB,LAB                                          7  0941  M P15 219           52
424                 MCW   @JOB@,OPCODE-2                                      7  0948  M X61 223           52
425                 MCW   JOBSAV,OPRAND                                       7  0955  M O85 278           52
426                 B     PRINT2                                              4  0962  B '61               52
427                 CS    OPRAND                                              4  0966  / 278               52
428         TSTCTL  BW    NOCNTL,CTLSW                                        8  0970  V '50 P19 1         52
429                 MCS   CTLALT,ALT                                          7  0978  Z P33 204           53
430                 MCS   CTLPAG,PG                                           7  0985  Z P35 207           53
431                 MZ    CTLPAG,PG                                           7  0992  Y P35 207           53
432                 MCW   CTLLIN,LIN                                          7  0999  M P38 211           53
433                 MCW   CTLSAV,PRINT&36                                     7  1006  M P29 236           53
434                 MCW   @CTL@,OPCODE-2                                      7  1013  M X64 223           54
435                 BW    CTLPNT,CTLSW1                                       8  1020  V '42 P39 1         54
436                 MCW   @BAD STATEMENT@,PRINT&128                           7  1028  M X77 328           54
437         ERRCTL  A     &1,ERRCT1                                           7  1035  A X78 O89           54
438         CTLPNT  B     PRINT2                                              4  1042  B '61               54
439                 B     GETMAN                                              4  1046  B K22               54
440         NOCNTL  MCW   @NO CONTROL CARD@,PRINT&130                         7  1050  M X93 330           55
441                 B     ERRCTL                                              4  1057  B '35               55
442         PRINT2  SBR   PNT2XT&3                                            4  1061  H /02               55
443                 BW    *&2,LSTOP1                                          8  1065  V '74 O93 1         55
444                 W                                                         1  1073  2                   55
445                 BW    PNT2XT,TAPOP1                                       8  1074  V '99 O92 1         55
446                 WT    3,200                                               8  1082  M %U3 200 W         56
447                 NOP   XXXX                                                4  1090  N 000               56
448                 BER   TPERRI                                              5  1094  B M03 L             56
449         PNT2XT  B     XXXX                                                4  1099  B 000               56
450         *
451         * TEST SENSE SWITCHES FOR OUTPUT OPTIONS
452         *
453         SENSW   LCA   @0@,OUTOPN                                          7  1103  L W89 P22           56
454                 LCA   @0@,CNDSW1                                          7  1110  L W89 O33           56
455                 MCW   @ @,LSTAPE                                          7  1117  M X94 P24           57
456                 SW    TAPOP1                                              4  1124  , O92               57
457                 BSS   ADD1,B                                              5  1128  B /68 B             57
458         TSTSSC  BSS   ADD2,C                                              5  1133  B /79 C             57
459         TSTSSG  BSS   ADD4,G                                              5  1138  B /90 G             57
460         TSTSSD  BSS   LSTAP,D                                             5  1143  B S01 D             57
461         TSTSSE  BSS   SUPLST,E                                            5  1148  B S09 E             57
462         SSXT    CW    OUTOPN                                              4  1153  ) P22               58
463                 MCW   @N@,TSTSIZ                                          7  1157  M X95 407           58
464                 B     CHKOP                                               4  1164  B J26               58
465         ADD1    A     &1,OUTOPN                                           7  1168  A X78 P22           58
466                 B     TSTSSC                                              4  1175  B /33               58
467         ADD2    A     &2,OUTOPN                                           7  1179  A X96 P22           58
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
468                 B     TSTSSG                                        4  1186  B /38               58
469         ADD4    A     &4,OUTOPN                                     7  1190  A X97 P22           59
470                 B     TSTSSD                                        4  1197  B /43               59
471         LSTAP   CW    TAPOP1                                        4  1201  ) O92               59
472                 B     TSTSSE                                        4  1205  B /48               59
473         SUPLST  SW    LSTOP1                                        4  1209  , O93               59
474                 B     SSXT                                          4  1213  B /53               59
475         *
476         * PRINT AND/OR PUNCH
477         *
478         PRTPNH  SBR   EXIT&3                                        4  1217  H T14               59
479                 MCS   PUNCH&75,CARDNO                               7  1221  Z 175 314           60
480                 BW    *&2,LSTOP1                                    8  1228  V S37 O93 1         60
481                 W                                                   1  1236  2                   60
482                 BW    PUNCH1,TAPOP1                                 8  1237  V S86 O92 1         60
483                 WT    3,200                                         8  1245  M %U3 200 W         60
484                 NOP   XXXX                                          4  1253  N 000               60
485                 BER   TPERRI                                        5  1257  B M03 L             61
486                 MCW   @&@,100                                       7  1262  M X98 100           61
487                 WT    3,100                                         8  1269  M %U3 100 W         61
488                 NOP   XXXX                                          4  1277  N 000               61
489                 BER   TPERRI                                        5  1281  B M03 L             61
490         PUNCH1  BCE   *&2,CNDSW1,0                                 8  1286  B S95 O33 0         61
491                 P                                                   1  1294  4                   61
492                 A     &1,PUNCH&75                                   7  1295  A X78 175           62
493                 CS    PRINT&132                                     4  1302  / 332               62
494                 CS                                                  1  1306  /                   62
495                 CS    PUNCH&71                                      4  1307  / 171               62
496         EXIT    B     XXXX                                          4  1311  B 000               62
497         *
498         * READ ORIGINAL TAPE
499         *
500         READ4   SBR   READ4X&3                                      4  1315  H T39               62
501                 RT    ORIGTP,INPUT4                                 8  1319  M %U4 H31 R         62
502                 B     CHKLG                                         4  1327  B T40               63
503                 BER   TPERRI                                        5  1331  B M03 L             63
504         READ4X  B     XXXX                                          4  1336  B 000               63
505         CHKLG   BCE   READ4&4,INPUT4&12,}                           8  1340  B T19 H43 } GMARK   63
506                 CHAIN 12                                                                MACRO
507                 BCE                                                 1  1348  B           GEN     63
508                 BCE                                                 1  1349  B           GEN     63
509                 BCE                                                 1  1350  B           GEN     63
510                 BCE                                                 1  1351  B           GEN     64
511                 BCE                                                 1  1352  B           GEN     64
512                 BCE                                                 1  1353  B           GEN     64
513                 BCE                                                 1  1354  B           GEN     64
514                 BCE                                                 1  1355  B           GEN     64
515                 BCE                                                 1  1356  B           GEN     64
516                 BCE                                                 1  1357  B           GEN     64
517                 BCE                                                 1  1358  B           GEN     65
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
518                 BCE                                                 1  1359  B           GEN     65
519                 B     READ4X-5                                      4  1360  B T31               65
520                 LTORG *                                                      1364
                    DCW   @1@                                           1  1364              LIT     65
                    DCW   @3@                                           1  1365              LIT     65
                    DCW   @6@                                           1  1366              LIT     65
                    DCW   @,053053N000000N00001026@                    23  1389              LIT     65
                    DCW   @,008015,022026,030037,044,049@              29  1418              LIT     66
                    DCW   @1,001/001117IO?@                            15  1433              LIT     67
                    DCW   @#071029C029056B026/B001/099@                27  1460              LIT     68
                    DCW   @L068116,105106,110117B101/I9I@              29  1489              LIT     69
                    DCW   @15@                                          2  1491              LIT     69
                    DCW   @,05705710026@                               11  1502              LIT     70
                    DCW   @,008015,019026,030,034041,045,053@          33  1535              LIT     71
                    DCW   @B0010270B0261,001/001113I0@                 26  1561              LIT     72
                    DCW   @L068112,102106,113/101099/I99,027A070028)027@ 44 1605             LIT     74
                    DCW   @S@                                           1  1606              LIT     74
                    DCW   @T@                                           1  1607              LIT     74
                    DCW   @I@                                           1  1608              LIT     74
                    DCW   @39@                                          2  1610              LIT     74
                    DCW   @7@                                           1  1611              LIT     75
                    DCW   @K@                                           1  1612              LIT     75
                    DCW   @11@                                          2  1614              LIT     75
                    DCW   @2@                                           1  1615              LIT     75
                    DCW   @,00100110400@                               11  1626              LIT     75
                    DCW   @,061068,072/061039@                         18  1644              LIT     75
                    DCW   @,008015,022029,036040,047054@               28  1672              LIT     76
                    DCW   @BOOTSTRAP@                                   9  1681              LIT     76
                    DCW   @400@                                         3  1684              LIT     77
                    DCW   @PAGE@                                        4  1688              LIT     77
                    DCW   @0@                                           1  1689              LIT     77
                    DCW   @SFX CT  LOCN  INSTRUCTION TYPE  CARD@       36  1725              LIT     78
                    DCW   @SEQ PG LIN  LABEL  OP    OPERANDS@          33  1758              LIT     79
                    DCW   @JOB@                                         3  1761              LIT     79
                    DCW   @CTL@                                         3  1764              LIT     79
                    DCW   @BAD STATEMENT@                              13  1777              LIT     80
                    DCW   &1                                            1  1778              LIT     80
                    DCW   @NO CONTROL CARD@                            15  1793              LIT     80
                    DCW   @ @                                           1  1794              LIT     80
                    DCW   @N@                                           1  1795              LIT     80
                    DCW   &2                                            1  1796              LIT     80
                    DCW   &4                                            1  1797              LIT     80
                    DCW   @&@                                           1  1798              LIT     81
521         ENDIN2  DCW   @}@                                           1  1799              GMARK   81
522                 XFR   LIBRN                                                 B 000               82
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

523                 JOB   1401 AUTOCODER-PASS 7 PROCESS EX/END -VERSION 3
524                 ORG   ISIOCS                                              0794
525         *
526         * EX, END CARDS
527         *
528         EXEND   MCW   @B@,INOP                                     7  0794  M D12 293           85
529                 MCW   @B@,HOLDH&1                                  7  0801  M D12 D93           85
530                 BCE   SETAOP,TYPE,C                                8  0808  B 830 075 C         85
531                 MCW   @/     080@,INBOP                            7  0816  M D21 301           85
532                 MCW   @/   080@,HOLDH&7                            7  0823  M D28 D99           85
533         SETAOP  MCW   AOP,INAOP                                    7  0830  M 070 297           86
534                 MCW   AOP,HOLDH&4                                  7  0837  M 070 D96           86
535                 BCE   SYMUND,AOP,#                                 8  0844  B L09 070 #         86
536                 B     SETLOC                                       4  0852  B U18               86
537                 B     CONDNS                                       4  0856  B L54               86
538                 B     PRNTLN                                       4  0860  B Y54               86
539                 BCE   GETOV1,TYPE,C                                8  0864  B Z63 075 C         87
540                 CC    1                                            2  0872  F 1                 87
541                 MCW   @1@,200                                      7  0874  M D29 200           87
542                 MCS   ERRCNT,PRINT&4                               7  0881  Z C66 204           87
543                 C     PRINT&4,BLANK4#4                             7  0888  C 204 D33           87
544                 BU    SETERH                                       5  0895  B 945 /             87
545         TSTCOR  BW    EOJOB,ADDRSW#1                               8  0900  V 928 D34 1         88
546                 MCW   WORD1,PRINT&20                               7  0908  M S49 220           88
547                 B     WTAPE                                        4  0915  B J24               88
548                 BW    *&2,LSTOP                                    8  0919  V 928 C70 1         88
549                 W                                                  1  0927  2                   88
550         EOJOB   BW    RESET,TAPOP                                  8  0928  V 543 C69 1         88
551                 WTM   3                                            5  0936  U %U3 M             89
552                 B     RESET                                        4  0941  B 543               89
553         SETERH  MCW   @ERRORS@,PRINT&11                            7  0945  M D40 211           89
554                 C     PRINT&4,@   1@                               7  0952  C 204 D44           89
555                 BU    *&8                                          5  0959  B 971 /             89
556                 MCW   BLANK1,PRINT&11                              7  0964  M D30 211           89
557                 B     WTAPE                                        4  0971  B J24               89
558                 BW    *&2,LSTOP                                    8  0975  V 984 C70 1         90
559                 W                                                  1  0983  2                   90
560                 CS    PRINT&11                                     4  0984  / 211               90
561                 B     TSTCOR                                       4  0988  B 900               90
562         *
563         * CONDENSE EX, END CARDS
564         *
565         NOCARD  C     WMLOC,AWMSTR                                 7  0992  C C75 C78           90
566                 BE    TSTEND                                       5  0999  B '20 S             90
567                 CW    NEWSW                                        4  1004  ) G27               90
568         ENDRTN  BW    NOCARD,NEWSW                                 8  1008  V 992 G27 1         91
569                 B     PNCHCD                                       4  1016  B P62               91
570         TSTEND  BCE   EXCUTE,TYPE,C                                8  1020  B '57 075 C         91
571                 CS    PUNCH&71                                     4  1028  / 171               91
572                 MCW   HOLDH&7,PUNCH&46                             7  1032  M D99 146           91
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

573                 MCS   PUNCH&75,CARDNO                             7  1039  Z 175 314           91
574                 SBR   PNHXT&3,LSTCD                                7  1046  H Q90 S11           92
575                 B     TSTPCH                                       4  1053  B Q21               92
576         EXCUTE  MCE   WMSTR,PUNCH&71                               7  1057  E D11 171           92
577                 MCW   @N000000@,PUNCH&46                           7  1064  M D51 146           92
578                 MCW   HOLDH&4,PUNCH&71                             7  1071  M D96 171           92
579                 MCS   PUNCH&75,CARDNO                             7  1078  Z 175 314           92
580                 SBR   PNHXT&3,EXOUT                                7  1085  H Q90 '96           93
581                 B     TSTPCH                                       4  1092  B Q21               93
582         *
583         * PUNCH COMPATIBILITY CARDS
584         *
585         EXOUT   CS    PUNCH&71                                     4  1096  / 171               93
586                 B     READOG                                       4  1100  B B09               93
587                 BSP   ORIGTP                                       5  1104  U %U4 B             93
588                 C     MNEMON-2,@JOB@                               7  1109  C H48 D54           93
589                 BU    *&8                                          5  1116  B /28 /             93
590                 MCW   IMAGE&80,PUNCH&80                            7  1121  M I10 180           94
591                 MCW   WORD2,PUNCH&39                               7  1128  M S88 139           94
592                 LCA   WORD3,PUNCH&66                               7  1135  L S99 166           94
593                 MCW   PUNCH&66,PUNCH&50                            7  1142  M 166 150           94
594                 BCE   *&2,CONDSW,0                                 8  1149  B /58 C10 0         94
595                 P                                                  1  1157  4                   94
596                 B     WTAP2                                        4  1158  B ?43               95
597                 CS    PUNCH&66                                     4  1162  / 166               95
598                 A     &1,PUNCH&75                                  7  1166  A D55 175           95
599                 MCW   WORD4,PUNCH&21                               7  1173  M T20 121           95
600                 MCW   WORD5,PUNCH&71                               7  1180  M T31 171           95
601                 SBR   PNHXT&3,OUTEX                                7  1187  H Q90 S26           95
602                 BCE   *&2,CONDSW,0                                 8  1194  B S03 C10 0         96
603                 P                                                  1  1202  4                   96
604                 B     WTAP2                                        4  1203  B ?43               96
605                 B     NEWCRD                                       4  1207  B Q34               96
606         LSTCD   CS    PUNCH&80                                     4  1211  / 180               96
607                 BCE   *&4,CONDSW,0                                 8  1215  B S26 C10 0         96
608                 P                                                  1  1223  4                   96
609                 SS    8                                            2  1224  K 8                 97
610         OUTEX   B     CNDOUT&7                                     4  1226  B ?14               97
611         WORD1   DCW   @OBJECT CORE EXCEEDED@                      20  1249                      97
612         WORD2   DCW   @,015022)024056,029036,040047,05406110l@     39  1288                      98
613         WORD3   DCW   @,001008B001@                               11  1299                      99
614         WORD4   DCW   @,068072)063067/061039@                     21  1320                      99
615         WORD5   DCW   @,0010011040@                               11  1331                     100
616         OV2GM   DCW   @}@                                          1  1332              GMARK  100
617                 XFR   LIBRN                                              B 000               101
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

618                 JOB   1401 AUTOCODER-PASS 7 LEFT MAIN LINE  -VERSION 3
619         *
620         * READ SECOND HALF OF MAIN PROGRAM
621         *
622                 ORG   201                                                 0201
623         INIT2   RTW   SYSTAP,2000                                    8  0201  L %U1 !00 R        104
624                 NOP   XXXX                                           4  0209  N 000              104
625                 BER   TPERR                                          5  0213  B 334 L            104
626                 RTW   XTRATP,SAVCON                                  8  0218  L %U6 B98 R        104
627                 NOP   XXXX                                           4  0226  N 000              104
628                 BER   TPERR                                          5  0230  B 334 L            104
629                 RWD   XTRATP                                         5  0235  U %U6 R            104
630                 CW    GMSAVE,WMSW#1                                  7  0240  ) C72 D56          105
631                 CW    ENDE1,ENDE2                                    7  0247  ) Z94 H27          105
632                 SW    GM,181                                         7  0254  , 333 181         105
633                 SW    OV1GM                                          4  0261  , U17              105
634                 WTW   XTRATP,ISIOCS                                  8  0265  L %U6 794 W        105
635                 NOP   XXXX                                           4  0273  N 000              105
636                 BER   TPERR                                          5  0277  B 334 L            106
637                 RWD   XTRATP                                         5  0282  U %U6 R            106
638                 CW    OV1GM                                          4  0287  ) U17              106
639                 ZA    &5,LINCT                                       7  0291  ? D57 F13          106
640                 BCE   RESET,NOOUT,1                                  8  0298  B 543 C71 1        106
641                 B     GET                                            4  0306  B A24             106
642                 B     SETUP                                          4  0310  B 595             106
643                 DCW   @ @                                            1  0314                    107
644         *
645         * MAIN LINE PROGRAM
646         *
647                 ORG   333                                                 0333
648         GM      DC    @}@                                            1  0333              GMARK  108
649         *
650         * TAPE REDUNDANCY ROUTINE
651         *
652         TPERR   SBR   XR2                                            4  0334  H 094             108
653                 SBR   REDXT&3                                        4  0338  H 406             108
654                 MZ    PLUS9,XR2                                      7  0342  Y 538 094         108
655                 MCW   4000-10&X2,TPINST&7                            7  0349  M IR0 397         108
656                 MN    TPINST&3,BSP1&3                                7  0356  D 393 373         109
657                 MCW   TPINST&7,INST2&7                               7  0363  M 397 506         109
658         BSP1    BSP   INITAP                                         5  0370  U %U0 B           109
659                 BCE   WRTRED,TPINST&7,W                              8  0375  B 479 397 W       109
660                 MCW   PLUS9,READCT                                   7  0383  M 538 540         109
661         TPINST  RT    INITAP,XXXX                                    8  0390  M %U0 000 R       110
662                 BER   RDRERR                                         5  0398  B 407 L           110
663         REDXT   B     XXXX                                           4  0403  B 000             110
664         RDRERR  MN    TPINST&3,BSP2&3                                7  0407  D 393 417         110
665         BSP2    BSP   INITAP                                         5  0414  U %U0 B           110
666                 S     PLUS1,READCT                                   7  0419  S 539 540         110
667                 BWZ   TPINSTM,READCT,B                               8  0426  V 390 540 B       111
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

668                 MN    TPINST&3,TPHALT&6                              7  0434  D 393 447         111
669         TPHALT  H     XXXX,790                                       7  0441  . 000 790         111
670                 MCW   TPINST&7,*&8                                   7  0448  M 397 462         111
671                 RT    INITAP,XXXX                                    8  0455  M %U0 000 R       111
672                 BSS   BSP1,E                                         5  0463  B 370 E           112
673                 H     XXXX,712                                       7  0468  . 000 712         112
674                 B     REDXT                                          4  0475  B 403             112
675         WRTRED  SKP   SYSTAP                                         5  0479  U %U1 E           112
676                 BCE   SUBCTR,WRTCTR-1,5                              8  0484  B 516 541 5       112
677                 A     PLUS1,WRTCTR                                   7  0492  A 539 542         112
678         INST2   WT    INITAP,XXXX                                    8  0499  M %U0 000 W       113
679                 BER   BSP1                                           5  0507  B 370 L           113
680                 B     REDXT                                          4  0512  B 403             113
681         SUBCTR  S     WRTCTR                                         4  0516  S 542             113
682                 MN    TPINST&3,*&7                                   7  0520  D 393 533         113
683                 H     XXXX,760                                       7  0527  . 000 760         113
684                 B     INST2                                          4  0534  B 499             113
685         PLUS9   DCW   &9                                             1  0538                    114
686         PLUS1   DCW   &1                                             1  0539                    114
687         READCT  DCW   #1                                             1  0540                    114
688         WRTCTR  DCW   #2                                             2  0542                    114
689         *
690         * GET PASS F
691         *
692         RESET   LCA   SSAVE,201                                      7  0543  L C68 201         114
693                 LCA                                                  1  0550  L                 114
694                 RT    SYSTAP,332                                     8  0551  M %U1 332 R       114
695                 CW    181,333                                        7  0559  ) 181 333         115
696                 RTW   SYSTAP,2000                                    8  0566  L %U1 !00 R       115
697                 NOP   XXXX                                           4  0574  N 000             115
698                 BER   TPERR                                          5  0578  B 334 L           115
699                 MCW   201,2001                                       7  0583  M 201 !01         115
700                 MCW                                                  1  0590  M                 115
701                 B     2002                                           4  0591  B !02             115
702         *
703         * BEGIN MAIN LINE PROGRAM
704         *
705         SETUP   CS    PRINT&132                                      4  0595  / 332             116
706                 CS                                                   1  0599  /                 116
707         GETORG  B     READOG                                         4  0600  B B09             116
708         *
709         * DETERMINE TYPE
710         *
711         ANALWK  SW    TYPESW#1                                       4  0604  , D58             116
712                 MN    TYPE,TYPEA#1                                   7  0608  D 075 D59         116
713                 BCE   BYPASS,TYPE,%                                  8  0615  B S85 075 %       116
714                 BCE   BYPASS,TYPE,8                                  8  0623  B S85 075 8       116
715                 BCE   BYPASS,TYPE,I                                  8  0631  B S85 075 I       117
716                 BCE   BYPASS,TYPE,H                                  8  0639  B S85 075 H       117
717                 BCE   PROWRK,ALTER,                                  8  0647  B 881 080         117
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
718         ANALOG BCE   SETCOM,LABEL-5,*                          8  0655  B J72 H36 *        117
719                BCE   MAPCNT,IMAGE&75,R                         8  0663  B 805 I05 R        118
720                BCE   ISIOCS,IMAGE&75,W                         8  0671  B 794 I05 W        118
721                BCE   MAPCNT&7,IMAGE&75,S                       8  0679  B 812 I05 S        118
722                BCE   MAPCNT&7,IMAGE&75,Z                       8  0687  B 812 I05 Z        118
723                C     MNEMON-2,@JOB@                            7  0695  C H48 D54          118
724                BE    DOJOB                                     5  0702  B 843 S            119
725                C     ALTER,ALTNO                               7  0707  C 080 I14          119
726                BU    SEQERR                                    5  0714  B ?83 /            119
727                B     SETFRE                                    4  0719  B T01              119
728                CW    TYPESW                                    4  0723  ) D58              119
729                BCE   INSTR,TYPE,                               8  0727  B V43 075          119
730                MN    TYPE,XR2                                  7  0735  D 075 094          120
731                A     XR2                                       4  0742  A 094              120
732                A     XR2                                       4  0746  A 094              120
733                B     *&1&X2                                    4  0750  B 7N4              120
734                B     DA                                        4  0754  B W52              120
735                B     CONST                                     4  0758  B '62              120
736                B     DSA                                       4  0762  B 969              120
737                B     GETOV2                                    4  0766  B ?94              121
738                B     SFX                                       4  0770  B L43              121
739                B     TYPERR                                    4  0774  B S78              121
740                B     ORG                                       4  0778  B K12              121
741                B     DS                                        4  0782  B K85              121
742                B     TYPERR                                    4  0786  B S78              121
743                B     TYPERR                                    4  0790  B S78              121
744         *
745         * MACRO CARD
746         *
747         ISIOCS MCW   @IOCS@,KIND-1                             7  0794  M D63 308          122
748                B     MAPCNT&7                                  4  0801  B 812              122
749         MAPCNT MCW   @MACRO@,KIND                              7  0805  M D68 309          122
750                B     SETFRE                                    4  0812  B T01              122
751                BCE   CALERR,IMAGE&86,7                         8  0816  B 828 I16 7        122
752                B     COMXT                                     4  0824  B J85              122
753         CALERR MCW   @OVERCALL@,PRINT&123                      7  0828  M D76 323          123
754                B     BMPERR                                    4  0835  B L28              123
755                B     COMXT                                     4  0839  B J85              123
756         *
757         * NEW JOB CARD
758         *
759         DOJOB  MCW   OPERND,JOB                                7  0843  M I02 C62          123
760                BW    DOIDT,NEWSW                               8  0850  V 862 G27 1        123
761                B     PNCHCD                                    4  0858  B P62              123
762         DOIDT  MCW   IMAGE&80,PUNCH&80                         7  0862  M I10 180          124
763                S     LINCT                                     4  0869  S F13              124
764                B     PRTHDG                                    4  0873  B !00              124
765                B     MAPCNT&7                                  4  0877  B 812              124
766         *
767         * PROGRAM GENERAGED RECORD
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
768         *
769         PROWRK BCE   XTRA,TYPE,Y                               8  0881  B 924 075 Y        124
770                CW    OP&1                                      4  0889  ) 068              124
771                MCS   AOP,PRINT&11                              7  0893  Z 070 211          124
772                SW    OP&1                                      4  0900  , 068              125
773                BCE   ADCON,TYPE,S                              8  0904  B 944 075 S        125
774                BCE   LITRAL,TYPEA,1                            8  0912  B 999 D59 1        125
775                B     TYPERR                                    4  0920  B S78              125
776         *
777         * LITERAL GREATER THAN 30 CHARACTERS
778         *
779         XTRA   SW    PRINT&27                                  4  0924  , 227              125
780                MCW   FIXFRM&72,OPRAND                          7  0928  M 072 278          125
781                CHAIN 5                                                                 MACRO
782                MCW                                             1  0935  M                GEN   125
783                MCW                                             1  0936  M                GEN   126
784                MCW                                             1  0937  M                GEN   126
785                MCW                                             1  0938  M                GEN   126
786                MCW                                             1  0939  M                GEN   126
787                B     BYPASS                                    4  0940  B S85              126
788         *
789         * ADCON CARD
790         *
791         ADCON  MCW   @ADCON@,KIND                              7  0944  M D81 309          126
792                SW    PRINT&27                                  4  0951  , 227              126
793                MCW   FIXFRM&53,PRINT&40                        7  0955  M 053 240          127
794                MCW   FIXFRM&16,OPCODE-2                        7  0962  M 016 223          127
795         DSA    MCW   BOP,PRINT&95                             7  0969  M 073 295          127
796                MCW   BOP,HOLDH&3                              7  0976  M 073 D95          127
797                B     SETADD                                    4  0983  B S45              127
798                BCE   SYMUND,BOP,#                              8  0987  B L09 073 #        128
799                B     SETLIT                                    4  0995  B /56              128
800         *
801         * LITERAL AND AREA DEFINITION CARDS
802         *
803         LITRAL BWZ   PROLIT,TYPE,S                             8  0999  V '41 075 S        128
804                BWZ   DADC,FIXFRM&1,B                           8  1007  V S28 001 B        128
805                MCW   @RMARK@,KIND                              7  1015  M D86 309          128
806                BCE   PROLIT&7,TYPE,A                           8  1022  B '48 075 A        129
807                MCW   @G@,KIND-4                                7  1030  M D87 305          129
808                B     PROLIT&7                                  4  1037  B '48              129
809         PROLIT MCW   @LIT@,KIND-2                              7  1041  M D90 307          129
810                MCW   FIXFRM&53,PRINT&57                        7  1048  M 053 257          129
811                MCW   FIXFRM&16,OPCODE-2                        7  1055  M 016 223          130
812         CONST  B     SETADD                                    4  1062  B S45              130
813                A     @00@,COUNT                                7  1066  A D92 007          130
814                C     COUNT,@00@                                7  1073  C 007 D92          130
815                BL    GOOD                                      5  1080  B '96 T            130
816                MZ    ZONE-1,STSTMT                             7  1085  Y 188 005          130
817                B     SETLIT                                    4  1092  B /56              131
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
818         GOOD    BCE   AREADF,PRINT&27,#                          8  1096  B /83 227 #         131
819                 BWZ   AREADF,FIXFRM&4,B                          8  1104  V /83 004 B         131
820                 MCW   OPRAND,HOLDDT-1                            7  1112  M 278 E43           131
821                 BCE   SETLIT,PRINT&27,@                          8  1119  B /56 227 @         131
822                 BWZ   UNSIGN,PRINT&27,2                          8  1127  V /72 227 2         132
823                 MCW   COUNT,XR1                                  7  1135  M 007 089           132
824                 MZ    BLANK4,PRINT&27&X1                         7  1142  Y D33 2S7           132
825                 MZ    PRINT&27,HOLDH&X1                          7  1149  Y 227 DZ2           132
826         SETLIT  B     SETLOC                                     4  1156  B U18               132
827                 B     CONDNS                                     4  1160  B L54               132
828         LITOUT  B     PRNTLN                                     4  1164  B Y54               133
829                 B     BYPASS                                     4  1168  B S85               133
830         UNSIGN  MCW   OPRAND,HOLDDT#52                           7  1172  M 278 E44           133
831                 B     SETLIT                                     4  1179  B /56               133
832         AREADF  BW    *&5,TYPESW                                 8  1183  V /95 D58 1         133
833                 B     SETLIT                                     4  1191  B /56               133
834                 MCW   FIXFRM&13,LAB                              7  1195  M 013 219           133
835                 MCW   BLANK4-2,PRINT&31                          7  1202  M D31 231           134
836                 MCW   COUNT                                      4  1209  M 007               134
837                 MCW   @#@                                        4  1213  M E45               134
838                 MCW   @AREA@,KIND-1                             7  1217  M E49 308           134
839                 B     SETLIT                                     4  1224  B /56               134
840         DADC    B     SETADD                                     4  1228  B S45               134
841                 B     CONDNS                                     4  1232  B L54               134
842                 CS    PRINT&132                                  4  1236  / 332               135
843                 CS                                               1  1240  /                   135
844                 B     BYPASS                                     4  1241  B S85               135
845         *
846         * SET CONDENSE ADDRESSES FOR CONSTANTS
847         *
848         SETADD  SBR   ADDXT&3                                    4  1245  H S77               135
849                 ZA    LABADD,LOADAD                              7  1249  ? 061 E83           135
850                 MCW   LOADAD                                     4  1256  M E83               135
851                 S     COUNT,WMADDR                               7  1260  S 007 E78           135
852                 A     &1,WMADDR                                  7  1267  A D55 E78           136
853         ADDXT   B     XXXX                                       4  1274  B 000               136
854         *
855         * GET NEXT RECORDS
856         *
857         TYPERR  H     XXXX,770                                   7  1278  . 000 770           136
858         BYPASS  B     GET                                        4  1285  B A24               136
859                 BW    ANALWK,TYPESW                              8  1289  V 604 D58 1         136
860                 B     GETORG                                     4  1297  B 600               136
861         *
862         * FREE FORM RECORD TO PRINT AREA
863         *
864         SETFRE  SBR   FREEXT&3                                   4  1301  H T89               136
865                 MCS   ALTNO,ALT                                  7  1305  Z I14 204           137
866                 MCS   PAGENO,PG                                  7  1312  Z H32 207           137
867                 MZ    PAGENO,PG                                  7  1319  Y H32 207           137
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
868                 MCW   LINENO,LIN                                 7  1326  M H35 211           137
869                 MCW   LABEL,LAB                                  7  1333  M H41 219           137
870                 MCW   MNEMON,OPCODE                              7  1340  M H50 225           138
871                 MCW   OPERND,OPRAND                              7  1347  M I02 278           138
872                 BCE   IOGEN,IMAGE&75,Z                          8  1354  B T90 I05 Z         138
873                 BCE   IOGEN,IMAGE&75,Y                          8  1362  B T90 I05 Y         138
874                 BCE   GENSTM,IMAGE&75,C                        8  1370  B T97 I05 C         138
875                 BCE   GENSTM,IMAGE&75,S                        8  1378  B T97 I05 S         139
876         FREEXT  B     XXXX                                       4  1386  B 000               139
877         IOGEN   MCW   @IO@,KIND                                  7  1390  M E51 309           139
878         GENSTM  MCW   @GEN@,KIND-2                             7  1397  M E54 307           139
879                 BCE   COMERR,IMAGE&86,B                          8  1404  B J97 I16 B         139
880                 B     FREEXT                                     4  1412  B T86               139
881                 DCW   @ @                                        1  1416                      139
882         OV1GM   DC    @}@                                        1  1417              GMARK   140
883         *
884         * ASSEMBLED INFORMATION TO PRINT AREA
885         *
886         SETLOC  SBR   LOCXT&3                                    4  1418  H V01               140
887                 MCS   COUNT,CT                                   7  1422  Z 007 284           140
888                 MCW   SFXCTR,SUFFIX                              7  1429  M G18 280           140
889                 MN    LABADD,LOCN                                7  1436  D 061 290           140
890                 MCW                                              1  1443  M                   141
891                 BWZ   TSTFR,LABADD-1,2                           8  1444  V U66 060 2         141
892                 MCW   @X@,PRINT&92                               7  1452  M E55 292           141
893                 MZ    BLANK1,PRINT&89                            7  1459  Y D30 289           141
894         TSTFR   BCE   FOURCH,LABADD-4,0                          8  1466  B V02 057 0         141
895         TSTLBL  BM    DBLDEF,STLABL                              8  1474  V V13 002 K         141
896         TSTSTM  BM    STMBAD,STSTMT                              8  1482  V V28 005 K         142
897                 BWZ   STMBAD,STSTMT,S                            8  1490  V V28 005 S         142
898         LOCXT   B     XXXX                                       4  1498  B 000               142
899         FOURCH  MCW   BLANK1,LOCN-4                              7  1502  M D30 286           142
900                 B     TSTLBL                                     4  1509  B U74               142
901         DBLDEF  MCW   @LABEL@,PRINT&120                          7  1513  M E60 320           142
902                 B     BMPERR                                     4  1520  B L28               143
903                 B     TSTSTM                                     4  1524  B U82               143
904         STMBAD  MCW   @BAD STATEMENT@,PRINT&128                  7  1528  M E73 328           143
905                 B     BMPERR                                     4  1535  B L28               143
906                 B     LOCXT                                      4  1539  B U98               143
907         *
908         * INSTRUCTION CARD
909         *
910         INSTR   MCW   DMOD,INDMOD                                7  1543  M 074 303           143
911                 MCW   BOP,INBOP                                  7  1550  M 073 301           143
912                 MCW   AOP,INAOP                                  7  1557  M 070 297           144
913                 MCW   OP,INOP                                    7  1564  M 067 293           144
914                 MCW   DMOD,HOLDH&8                               7  1571  M 074 E00           144
915                 MCW                                              1  1578  M                   144
916                 MCW                                              1  1579  M                   144
917                 MCW                                              1  1580  M                   144
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 918                MCW   LABADD,WMADDR#5                             7  1581  M 061 E78          144
 919                MCW   LABADD,LOADAD#5                            7  1588  M 061 E83          145
 920                A     COUNT,LOADAD                               7  1595  A 007 E83          145
 921                S     &1,LOADAD                                  7  1602  S D55 E83          145
 922                BCE   SYMUND,BOP,#                               8  1609  B L09 073 #        145
 923                BCE   SYMUND,AOP,#                               8  1617  B L09 070 #        145
 924                BCE   BADOP,OP,                                  8  1625  B W37 067          146
 925                B     SETLIT                                     4  1633  B /56              146
 926         BADOP  MCW   @ OP@,PRINT&123                            7  1637  M E86 323          146
 927                B     BMPERR                                     4  1644  B L28              146
 928                B     SETLIT                                     4  1648  B /56              146
 929         *
 930         * DEFINE AREA CARDS
 931         *
 932         DA     BCE   HEADER,TYPE,0                              8  1652  B X41 075 0        146
 933                MCW   SUPADD,WMADDR                              7  1660  M 066 E78          147
 934                MCW   @FIELD@,KIND                               7  1667  M E91 309          147
 935                BWZ   SETDA,TYPE,B                               8  1674  V W93 075 B        147
 936                MCW   @SBF@,KIND-2                               7  1682  M E94 307          147
 937                B     ORGXT                                      4  1689  B K62              147
 938         SETDA  B     SETLOC                                     4  1693  B U18              147
 939                B     CONDNS                                     4  1697  B L54              148
 940                B     PRNTLN                                     4  1701  B Y54              148
 941         BYPDA  B     GET                                        4  1705  B A24              148
 942                BCE   RPTOUT,TYPE,'                              8  1709  B X21 075 '        148
 943                B     GETORG                                     4  1717  B 600              148
 944         RPTOUT MCW   SUPADD,WMADDR                              7  1721  M 066 E78          148
 945                B     CONDNS                                     4  1728  B L54              148
 946                CS    PRINT&132                                  4  1732  / 332              149
 947                CS                                               1  1736  /                  149
 948                B     BYPDA                                      4  1737  B X05              149
 949         HEADER BWZ   BADDA,FIXFRM&4,B                           8  1741  V Y24 004 B        149
 950                B     SETLOC                                     4  1749  B U18              149
 951         NXTRPT MN    SUPADD,PRINT&97                            7  1753  D 066 297          149
 952                MCW                                              1  1760  M                  149
 953                MCW   LABADD,WMADDR                              7  1761  M 061 E78          150
 954                B     CONDNS                                     4  1768  B L54              150
 955                B     GET                                        4  1772  B A24              150
 956                C     FIXFRM&16,@DA @                            7  1776  C 016 E97          150
 957                BU    PNTDA                                      5  1783  B X96 /            150
 958                BCE   NXTRPT,TYPE,'                              8  1788  B X53 075 '        150
 959         PNTDA  BCE   ADDR4K,PRINT&93,0                          8  1796  B Y39 293 0        151
 960                C     PRINT&97,OBJCOR                            7  1804  C 297 C09          151
 961                BL    PUADSW                                     5  1811  B K97 T            151
 962                B     PRNTLN                                     4  1816  B Y54              151
 963                B     GETORG                                     4  1820  B 600              151
 964         BADDA  MCW   @ NO B X L@,PRINT&129                      7  1824  M F06 329          151
 965                B     BMPERR                                     4  1831  B L28              151
 966                B     HEADER&8                                   4  1835  B X49              152
 967         ADDR4K SBR   AD4KXT&3                                   4  1839  H Y53              152
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 968                MCW   BLANK1,PRINT&93                           7  1843  M D30 293          152
 969         AD4KXT B     XXXX                                       4  1850  B 000              152
 970         *
 971         * PRINT STATEMENTS
 972         *
 973         PRNTLN SBR   PRNTXT&3                                   4  1854  H Z50              152
 974                BCE   DOPNT,LOCN,                                8  1858  B Y86 290          152
 975                BCE   DOPNT,TYPEA,7                              8  1866  B Y86 D59 7        152
 976                C     LOCN,@ 0081@                               7  1874  C 290 F11          153
 977                BH    ADDERR                                     5  1881  B J57 U            153
 978         DOPNT  BW    *&2,LSTOP                                  8  1886  V Y95 C70 1        153
 979                W                                                1  1894  2                  153
 980                B     WTAPE                                      4  1895  B J24              153
 981                BCE   CLR,TYPEA,7                                8  1899  B Z19 D59 7        153
 982                C     LOCN,OBJCOR                                7  1907  C 290 C09          154
 983                BL    PUADSW                                     5  1914  B K97 T            154
 984         CLR    CS    PRINT&132                                  4  1919  / 332              154
 985                CS                                               1  1923  /                  154
 986                BCE   PRNTXT,TYPE,3                              8  1924  B Z47 075 3        154
 987                A     &1,LINCT#2                                 7  1932  A D55 F13          154
 988                BCE   OVRFLO,LINCT-1,5                           8  1939  B Z51 F12 5        155
 989         PRNTXT B     XXXX                                       4  1947  B 000              155
 990         OVRFLO B     PRTHDG                                     4  1951  B !00              155
 991                S     LINCT                                      4  1955  S F13              155
 992                B     PRNTXT                                     4  1959  B Z47              155
 993         GETOV1 RTW   XTRATP,ISIOCS                              8  1963  L %U6 794 R        155
 994                NOP   XXXX                                       4  1971  N 000              155
 995                BER   TPERR                                      5  1975  B 334 L            156
 996                CW    OV1GM                                      4  1980  ) U17              156
 997                RWD   XTRATP                                     5  1984  U %U6 R            156
 998                B     BYPASS                                     4  1989  B S85              156
 999                DCW   @ @                                        1  1993                     156
1000         ENDE1  DCW   @}@                                        1  1994           GMARK     156
1001                XFR   LIBRN                                             B 000              157
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 SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1002                JOB   1401 AUTOCODER-PASS 7 RIGHT MAIN LINE     -VERSION 3
1003                ORG   2000                                                    2000
1004         *
1005         * PRINT PAGE HEADING
1006         *
1007         PRTHDG SBR   PHDGXT&3                                            4  2000  H J23             160
1008                MCW   @PAGE@,PRINT&109                                    7  2004  M F17 309         160
1009                A     &1,NUMBER                                           7  2011  A D55 C84         160
1010                MCS   NUMBER,PRINT&114                                    7  2018  Z C84 314         160
1011                MCW   JOB,OPRAND                                          7  2025  M C62 278         160
1012                MCW   PUNCH&80,LOCN                                       7  2032  M 180 290         160
1013                BW    WTHEAD,LSTOP                                        8  2039  V !52 C70 1       161
1014                CC    1                                                   2  2047  F 1               161
1015                W                                                         1  2049  2                 161
1016                CC    K                                                   2  2050  F K               161
1017         WTHEAD MCW   @1@,200                                             7  2052  M D29 200         161
1018                B     WTAPE                                               4  2059  B J24             161
1019                CS    PRINT&132                                           4  2063  / 332             161
1020                CS                                                        1  2067  /                 162
1021                MCW   @SFX CT  LOCN  INSTRUCTION TYPE  CARD@,PRINT&114   7  2068  M F53 314         162
1022                MCW   @SEQ PG LIN  LABEL  OP    OPERANDS@,PRINT&34       7  2075  M F86 234         162
1023                BW    *&2,LSTOP                                           8  2082  V !91 C70 1       162
1024                W                                                         1  2090  2                 162
1025                MCW   @0@,200                                            7  2091  M F87 200         162
1026                B     WTAPE                                               4  2098  B J24             162
1027                CS    PRINT&132                                           4  2102  / 332             163
1028                CS                                                        1  2106  /                 163
1029                BW    *&2,LSTOP                                           8  2107  V J16 C70 1       163
1030                W                                                         1  2115  2                 163
1031                B     WTAPE                                               4  2116  B J24             163
1032         PHDGXT B     XXXX                                                4  2120  B 000             163
1033         WTAPE  SBR   WTXT&3                                              4  2124  H J56             163
1034                BW    WTXT,TAPOP                                          8  2128  V J53 C69 1       164
1035                WT    3,200                                               8  2136  M %U3 200 W       164
1036                NOP   XXXX                                                4  2144  N 000             164
1037                BER   TPERR                                               5  2148  B 334 L           164
1038         WTXT   B     XXXX                                                4  2153  B 000             164
1039         ADDERR MCW   @ ADDR@,PRINT&132                                   7  2157  M F92 332         164
1040                B     BMPERR                                              4  2164  B L28             165
1041                B     DOPNT                                               4  2168  B Y86             165
1042         *
1043         * COMMENTS CARD
1044         *
1045         SETCOM B     SETFRE                                              4  2172  B T01             165
1046                MCW   OPERND,PRINT&80                                     7  2176  M I02 280         165
1047                MCW                                                       1  2183  M                 165
1048                MCW                                                       1  2184  M                 165
1049         COMXT  B     PRNTLN                                              4  2185  B Y54             165
1050                B     READOG                                              4  2189  B B09             166
1051                B     ANALOG                                              4  2193  B 655             166
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 SEQ PG LIN  LABEL   OP    OPERANDS                                      SFX CT  LOCN  INSTRUCTION TYPE  CARD

1052         COMERR MCW   @MACRO ERROR@,PRINT&126                           7  2197  M G03 326         166
1053                B     BMPERR                                            4  2204  B L28             166
1054                B     FREEXT                                            4  2208  B T86             166
1055         *
1056         * ORG, LTORG CARDS
1057         *
1058         ORG    MCW   SUPADD,LABADD                                     7  2212  M 066 061         166
1059                MCW   ORGADD,SUPADD                                     7  2219  M 032 066         166
1060                BWZ   BADORG,FIXFRM&1,2                                 8  2226  V K70 001 2       167
1061         ORGOUT MN    SUPADD,PRINT&97                                   7  2234  D 066 297         167
1062                MCW                                                     1  2241  M                 167
1063                BCE   ADDR4K,PRINT&93,0                                 8  2242  B Y39 293 0       167
1064                C     PRINT&97,OBJCOR                                   7  2250  C 297 C09         167
1065                BL    PUADSW                                            5  2257  B K97 T           167
1066         ORGXT  B     SETLOC                                            4  2262  B U18             168
1067                B     LITOUT                                            4  2266  B /64             168
1068         BADORG MCW   @ UNDEF ORG@,PRINT&130                            7  2270  M G13 330         168
1069                B     BMPERR                                            4  2277  B L28             168
1070                B     ORGOUT                                            4  2281  B K34             168
1071         *
1072         * DS, EQU CARDS
1073         *
1074         DS     BCE   SYMUND,AOP,#                                      8  2285  B L09 070 #       168
1075                B     ORGXT                                             4  2293  B K62             168
1076         *
1077         * ERROR - ADDRESS EXCEEDS CORE
1078         *
1079         PUADSW SBR   ADSWXT&3                                          4  2297  H L08             169
1080                CW    ADDRSW                                            4  2301  ) D34             169
1081         ADSWXT B     XXXX                                              4  2305  B 000             169
1082         *
1083         * ERROR - UNDEFINED SYMBOL
1084         *
1085         SYMUND SBR   UNDXT&3                                           4  2309  H L27             169
1086                MCW   @ SYM@,PRINT&127                                  7  2313  M G17 327         169
1087                B     BMPERR                                            4  2320  B L28             169
1088         UNDXT  B     XXXX                                              4  2324  B 000             169
1089         *
1090         * BUMP NUMBER OF ERRORS
1091         *
1092         BMPERR SBR   ERREXT&3                                          4  2328  H L42             170
1093                A     &1,ERRCNT                                         7  2332  A D55 C66         170
1094         ERREXT B     XXXX                                              4  2339  B 000             170
1095         *
1096         * SUFFIX CARD
1097         *
1098         SFX    MCW   IMAGE&21,SFXCTR#1                                 7  2343  M H51 G18         170
1099                B     LITOUT                                            4  2350  B /64             170
1100         *
1101         * CONDENSE ROUTINE
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 SEQ PG LIN  LABEL    OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1102         *
1103         CONDNS SBR   CONDXT&3                                      4  2354  H ?42             170
1104                CW    BIGSW,DCSW                                    7  2358  ) H17 G48         170
1105                BM    CONDXT,STSTMT                                 8  2365  V ?39 005 K       171
1106                BW    PNCHCD,WMSW                                   8  2373  V P62 D56 1       171
1107         *
1108         * PROCESS RECORD
1109         *
1110         NXTRCD BCE   DOWM,TYPEA,0                                  8  2381  B N39 D59 0       171
1111                BCE   ENDRTN,TYPEA,3                                8  2389  B '08 D59 3       171
1112                BWZ   TSTDC,TYPE,B                                  8  2397  V O17 075 B       172
1113         *
1114         * TEST ROOM ON CARD
1115         *
1116         TSTROM C     COUNT,@39@                                    7  2405  C 007 G20         172
1117                BL    TSTCON                                        5  2412  B Q91 T           172
1118                MCW   PNHLOC,ROOMCT#3                               7  2417  M C81 G23         172
1119                A     COUNT,ROOMCT                                  7  2424  A 007 G23         172
1120                C     ROOMCT,@039@                                  7  2431  C G23 G26         173
1121                BL    SETPNH                                        5  2438  B O09 T           173
1122                BW    RSTCTR,NEWSW#1                                8  2443  V N98 G27 1       173
1123         *
1124         * TEST SEQUENCE
1125         *
1126                MCW   COUNTR#5,SEQCT#5                              7  2451  M G32 G37         173
1127                A     COUNT,SEQCT                                   7  2458  A 007 G37         173
1128                C     LOADAD,SEQCT                                  7  2465  C E83 G37         174
1129                BU    SETPNH                                        5  2472  B O09 /           174
1130                A     COUNT,COUNTR                                  7  2477  A 007 G32         174
1131         *
1132         * MOVE DATA TO PUNCH AREA
1133         *
1134         MVDATA SBR   XR3,HOLDH                                     7  2484  H 099 D92         174
1135                A     COUNT,XR3                                     7  2491  A 007 099         174
1136                A     COUNT,PNHLOC                                  7  2498  A 007 C81         175
1137                MCW   PNHLOC,XR2                                    7  2505  M C81 094         175
1138                MCW   XXXX&X3,PUNCH&X2                              7  2512  M 0?0 1!0         175
1139                CW    DATASW#1                                      4  2519  ) G38             175
1140                BW    FIRST,NEWSW                                   8  2523  V O53 G27 1       175
1141                BWZ   CNDOUT,TYPE,B                                 8  2531  V ?07 075 B       176
1142         *
1143         * SET WORD MARK ADDRESS
1144         *
1145         DOWM   MCW   WMADDR,CNVADD#5                               7  2539  M E78 G43         176
1146                B     CNVRT                                         4  2546  B P16             176
1147                A     &3,WMLOC                                      7  2550  A G44 C75         176
1148                MCW   WMLOC,XR1                                     7  2557  M C75 089         176
1149                MCW   CNVADD,WMADDR-2                               7  2564  M G43 E76         177
1150                MCW   WMADDR-2,XXXX&X1                              7  2571  M E76 0'0         177
1151                C     XR1,&WMSTR-3                                  7  2578  C 089 G47         177
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 SEQ PG LIN  LABEL    OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1152                BU    CNDOUT                                        5  2585  B ?07 /           177
1153                SW    WMSW                                          4  2590  , D56             177
1154                B     CNDOUT                                        4  2594  B ?07             177
1155         RSTCTR MCW   LOADAD,COUNTR                                 7  2598  M E83 G32         178
1156                B     MVDATA                                        4  2605  B M84             178
1157         SETPNH B     PNCHCD                                        4  2609  B P62             178
1158                B     NXTRCD                                        4  2613  B L81             178
1159         TSTDC  BW    COMPWM,NEWSW                                  8  2617  V O29 G27 1       178
1160                B     TSTROM                                        4  2625  B M05             178
1161         COMPWM C     WMLOC,AWMSTR                                  7  2629  C C75 C78         178
1162                BE    TSTROM                                        5  2636  B M05 S           179
1163                SW    DCSW#1                                        4  2641  , G48             179
1164                B     PNCHCD                                        4  2645  B P62             179
1165                B     TSTROM                                        4  2649  B M05             179
1166         *
1167         * FIRST DATA ON CARD
1168         *
1169         FIRST  CW    NEWSW                                         4  2653  ) G27             179
1170                BWZ   PRODC,TYPE,B                                  8  2657  V O69 075 B       179
1171                B     CNDOUT                                        4  2665  B ?07             179
1172         *
1173         * CONDENSE DC CARDS
1174         *
1175         PRODC  MCW   @)@,PUNCH&47                                  7  2669  M G49 147         180
1176                MCW   WMADDR,CNVADD                                 7  2676  M E78 G43         180
1177                B     CNVRT                                         4  2683  B P16             180
1178                MCW   CNVADD,WMADDR-2                               7  2687  M G43 E76         180
1179                MCW   WMADDR-2,WMSTR-15                             7  2694  M E76 C96         180
1180                MCW   WMADDR-2                                     4  2701  M E76             180
1181                A     &6,WMLOC                                      7  2705  A G50 C75         181
1182                B     CNDOUT                                        4  2712  B ?07             181
1183         *
1184         * CONVERT 5 TO 3 DIGIT ADDRESS
1185         *
1186         CNVRT  SBR   CNVXT&3                                       4  2716  H P61             181
1187                BAV   *&1                                           5  2720  B P25 Z           181
1188         ADDAGN A     &96,CNVADD-3                                  7  2725  A G52 G40         181
1189                BAV   ADDAGN                                        5  2732  B P25 Z           181
1190                MZ    CNVADD-4,CNVADD                               7  2737  Y G39 G43         181
1191                MN    CNVADD-3,*&4                                  7  2744  D G40 P54         182
1192                MZ    ZONE,CNVADD-2                                 7  2751  Y 189 G41         182
1193         CNVXT  B     XXXX                                          4  2758  B 000             182
1194         *
1195         * PUNCH A CARD
1196         *
1197         PNCHCD SBR   PNHXT&3                                       4  2762  H Q90             182
1198                BW    EDIT,DCSW                                     8  2766  V Q07 G48 1       182
1199                BW    EDIT,DATASW                                   8  2774  V Q07 G38 1       182
1200                MCW   COUNTR,CNVADD                                 7  2782  M G32 G43         183
1201                B     CNVRT                                         4  2789  B P16             183
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1202                MCW   CNVADD,WMSTR-21                                      7  2793  M G43 C90          183
1203                MCW   PNHLOC,WMSTR-24                                      7  2800  M C81 C87          183
1204         EDIT   MCE   WMSTR,PUNCH&71                                       7  2807  E D11 171          183
1205                MN    @0@,PUNCH&41                                        7  2814  D F87 141          183
1206         TSTPCH BCE   *&2,CONDSW,0                                        8  2821  B Q30 C10 0        184
1207                P                                                         1  2829  4                  184
1208                B     WTAP2                                               4  2830  B ?43              184
1209         *
1210         * RESET COUNTERS AND SWITCHES
1211         *
1212         NEWCRD A     &1,PUNCH&75                                         7  2834  A D55 175          184
1213                CS    PUNCH&71                                            4  2841  / 171              184
1214                LCA   @L0     ,      ,      ,      1   @,PUNCH&71        7  2845  L G84 171          184
1215                SW    NEWSW,DATASW                                        7  2852  , G27 G38          184
1216                CW    WMSW,DCSW                                           7  2859  ) D56 G48          185
1217                MCW   @000@,PNHLOC                                        7  2866  M G87 C81          185
1218                MCW   AWMSTR,WMLOC                                        7  2873  M C78 C75          185
1219                MCW   @00100104004004004004004004004004@,WMSTR           7  2880  M H14 D11          185
1220         PNHXT  B     XXXX                                                4  2887  B 000              185
1221         *
1222         * CONSTANT GREATER THAN 39 CHARACTERS*
1223         *
1224         TSTCON BW    *&5,NEWSW                                           8  2891  V R03 G27 1        186
1225                B     PNCHCD                                              4  2899  B P62              186
1226                MCW   COUNT,HOLDCT#2                                      7  2903  M 007 H16          186
1227                MCW   LOADAD,COUNTR                                       7  2910  M E83 G32          186
1228                MCW   @39@,COUNT                                         7  2917  M G20 007          186
1229                S     @39@,HOLDCT                                         7  2924  S G20 H16          187
1230                S     HOLDCT,COUNTR                                       7  2931  S H16 G32          187
1231                MZ    ZONE-3,HOLDCT                                       7  2938  Y 186 H16          187
1232                SW    BIGSW#1                                             4  2945  , H17              187
1233                MCW   WMADDR,SAVEWM#5                                     7  2949  M E78 H22          187
1234                B     MVDATA                                              4  2956  B M84              187
1235         BIGRN  B     PNCHCD                                              4  2960  B P62              188
1236                CW    BIGSW                                               4  2964  ) H17              188
1237                MCW   HOLDCT,COUNT                                       7  2968  M H16 007          188
1238                MCW   @A@,TYPE                                          7  2975  M H23 075          188
1239                MCW   HOLDDT,HOLDDT-39                                    7  2982  M E44 E05          188
1240                MCW   SAVEWM,WMADDR                                       7  2989  M H22 E78          188
1241                A     @39@,WMADDR                                         7  2996  A G20 E78          189
1242                B     RSTCTR                                              4  3003  B N98              189
1243         *
1244         * EXIT FROM CONDENSE ROUTINE*
1245         *
1246         CNDOUT MCS   PUNCH&75,CARDNO                                      7  3007  Z 175 314          189
1247                S     XR3&1                                               4  3014  S 100              189
1248                S                                                         1  3018  S                  189
1249                S                                                         1  3019  S                  189
1250                BW    BIGRN,BIGSW                                         8  3020  V R60 H17 1        189
1251                MCW   BLANK1,HOLDDT                                       7  3028  M D30 E44          190
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1252                MCW   HOLDDT                                              4  3035  M E44              190
1253         CONDXT B     XXXX                                                4  3039  B 000              190
1254         WTAP2  SBR   WT2XT&3                                             4  3043  H ?82              190
1255                BW    WT2XT,TAPOP                                         8  3047  V ?79 C69 1        190
1256                MCW   @&@,100                                            7  3055  M H24 100          190
1257                WT    3,100                                               8  3062  M %U3 100 W        191
1258                NOP   XXXX                                                4  3070  N 000              191
1259                BER   TPERR                                               5  3074  B 334 L            191
1260         WT2XT  B     XXXX                                                4  3079  B 000              191
1261         *
1262         * SEQUENCE ERROR ON INPUT RECORDS
1263         *
1264         SEQERR H     XXXX,777                                            7  3083  . 000 777          191
1265                B     SEQERR                                              4  3090  B ?83              191
1266         GETOV2 RTW   SYSTAP,ISIOCS                                       8  3094  L %U1 794 R        192
1267                NOP   XXXX                                                4  3102  N 000              192
1268                BER   TPERR                                               5  3106  B 334 L            192
1269                CW    OV2GM                                               4  3111  ) T32              192
1270                BSP   SYSTAP                                             5  3115  U %U1 B            192
1271                B     EXEND                                               4  3120  B 794              192
1272         *
1273         * GET RECORD FROM WORKING TAPE
1274         *
1275         GET    SBR   WORKXT&3                                            4  3124  H B08              192
1276                C     BLKCT,KBLKNG                                        7  3128  C C00 C04          193
1277                BU    NXTREC                                              5  3135  B A68 /            193
1278                S     HOLDA                                               4  3140  S C01              193
1279                SBR   LGTCK&6,INPUT5&13                                   7  3144  H B80 I31          193
1280                RT    WORKTP,INPUT5                                       8  3151  M %U5 I18 R        193
1281                B     CHKLGT                                              4  3159  B B59              193
1282                BER   TPERR                                               5  3163  B 334 L            194
1283         NXTREC A     &80,BLKCT                                           7  3168  A H26 C00          194
1284                MCW   BLKCT,XR3                                           7  3175  M C00 099          194
1285                MCW   FIXINP,FIXFRM&80                                    7  3182  M IA7 080          194
1286                CHAIN 10                                                                  MACRO
1287                MCW                                                       1  3189  M                  GEN    194
1288                MCW                                                       1  3190  M                  GEN    194
1289                MCW                                                       1  3191  M                  GEN    194
1290                MCW                                                       1  3192  M                  GEN    195
1291                MCW                                                       1  3193  M                  GEN    195
1292                MCW                                                       1  3194  M                  GEN    195
1293                MCW                                                       1  3195  M                  GEN    195
1294                MCW                                                       1  3196  M                  GEN    195
1295                MCW                                                       1  3197  M                  GEN    195
1296                MCW                                                       1  3198  M                  GEN    195
1297                S     XR3&1                                               4  3199  S 100              196
1298                S                                                         1  3203  S                  196
1299                S                                                         1  3204  S                  196
1300         WORKXT B     XXXX                                                4  3205  B 000              196
1301         *
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1302         * READ ORIGINAL TAPE
1303         *
1304         READOG SBR   ORIGXT&3                                      4  3209  H B58             196
1305                MCW   BLANK1,IMAGE&21                               7  3213  M D30 H51         196
1306                S     IMAGE&20                                      4  3220  S H50             196
1307                S                                                   1  3224  S                 197
1308                S                                                   1  3225  S                 197
1309                S                                                   1  3226  S                 197
1310                SBR   LGTCK&6,INPUT4&12                             7  3227  H B80 H43         197
1311                RT    ORIGTP,INPUT4                                 8  3234  M %U4 H31 R       197
1312                B     CHKLGT                                        4  3242  B B59             197
1313                BER   TPERR                                         5  3246  B 334 L           197
1314                S     XR2&1                                         4  3251  S 095             198
1315         ORIGXT B     XXXX                                          4  3255  B 000             198
1316         *
1317         * CHECK FOR SHORT RECORDS
1318         *
1319         CHKLGT SBR   XR2                                           4  3259  H 094             198
1320                SBR   LGTXT&3                                       4  3263  H B97             198
1321                MZ    @B@,XR2                                       7  3267  Y D12 094         198
1322         LGTCK  BCE   4000-12&X2,XXXX,}                             8  3274  B IQ8 000 } GMARK 198
1323                CHAIN 12                                                                 MACRO
1324                BCE                                                 1  3282  B           GEN   198
1325                BCE                                                 1  3283  B           GEN   199
1326                BCE                                                 1  3284  B           GEN   199
1327                BCE                                                 1  3285  B           GEN   199
1328                BCE                                                 1  3286  B           GEN   199
1329                BCE                                                 1  3287  B           GEN   199
1330                BCE                                                 1  3288  B           GEN   199
1331                BCE                                                 1  3289  B           GEN   199
1332                BCE                                                 1  3290  B           GEN   200
1333                BCE                                                 1  3291  B           GEN   200
1334                BCE                                                 1  3292  B           GEN   200
1335                BCE                                                 1  3293  B           GEN   200
1336         LGTXT  B     XXXX                                          4  3294  B 000             200
1337         HOLDA  DCW   &0000                                         4  3301                    200
1338         BLKCT  EQU   HOLDA-1                                          3300
1339         KBLKNG DCW   @080@                                         3  3304                    200
1340         OBJCOR DCW   @ 3999@                                       5  3309                    201
1341         CONDSW DCW   @0@                                           1  3310                    201
1342         JOB    DCW   #52                                          52  3362                    203
1343         ERRCNT DCW   @0000@                                        4  3366                    203
1344                DCW   @ @                                           1  3367                    203
1345         SSAVE  DCW   @ @                                           1  3368                    203
1346         TAPOP  DCW   @ @                                           1  3369                    203
1347         LSTOP  DCW   @ @                                           1  3370                    204
1348         NOOUT  DCW   @ @                                           1  3371                    204
1349         SAVCON EQU   HOLDA-3                                          3298
1350         GMSAVE DC    @}@                                           1  3372            GMARK  204
1351         WMLOC  DSA   WMSTR-21                                      3  3375  C90               204
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1352         AWMSTR DSA   WMSTR-21                                    3  3378  C90               204
1353         PNHLOC DCW   @000@                                         3  3381                    204
1354         NUMBER DCW   @001@                                         3  3384                    204
1355         WMSTR  DCW   @00100104004004004004004004004004@          27  3411                    205
1356                LTORG *                                                    3412
                    DCW   @B@                                           1  3412            LIT   205
                    DCW   @/     080@                                   9  3421            LIT   205
                    DCW   @/   080@                                     7  3428            LIT   206
                    DCW   @1@                                           1  3429            LIT   206
                    BLANK4 DCW   #04                                    4  3433            AREA  206
                    ADDRSW DCW   #01                                    1  3434            AREA  206
                    DCW   @ERRORS@                                      6  3440            LIT   206
                    DCW   @   1@                                        4  3444            LIT   206
                    DCW   @N000000@                                     7  3451            LIT   206
                    DCW   @JOB@                                         3  3454            LIT   207
                    DCW   &1                                            1  3455            LIT   207
                    WMSW   DCW   #01                                    1  3456            AREA  207
                    DCW   &5                                            1  3457            LIT   207
                    TYPESW DCW   #01                                    1  3458            AREA  207
                    TYPEA  DCW   #01                                    1  3459            AREA  207
                    DCW   @IOCS@                                        4  3463            LIT   207
                    DCW   @MACRO@                                       5  3468            LIT   208
                    DCW   @OVERCALL@                                    8  3476            LIT   208
                    DCW   @ADCON@                                       5  3481            LIT   208
                    DCW   @RMARK@                                       5  3486            LIT   208
                    DCW   @G@                                           1  3487            LIT   208
                    DCW   @LIT@                                         3  3490            LIT   208
                    DCW   @00@                                          2  3492            LIT   208
                    HOLDDT DCW   #52                                   52  3544            AREA  210
                    DCW   @#@                                           1  3545            LIT   210
                    DCW   @AREA@                                        4  3549            LIT   210
                    DCW   @IO@                                          2  3551            LIT   210
                    DCW   @GEN@                                         3  3554            LIT   210
                    DCW   @X@                                           1  3555            LIT   211
                    DCW   @LABEL@                                       5  3560            LIT   211
                    DCW   @BAD STATEMENT@                              13  3573            LIT   211
                    WMADDR DCW   #05                                    5  3578            AREA  211
                    LOADAD DCW   #05                                    5  3583            AREA  211
                    DCW   @ OP@                                         3  3586            LIT   211
                    DCW   @FIELD@                                       5  3591            LIT   211
                    DCW   @SBF@                                         3  3594            LIT   212
                    DCW   @DA @                                         3  3597            LIT   212
                    DCW   @ NO B X L@                                   9  3606            LIT   212
                    DCW   @ 0081@                                       5  3611            LIT   212
                    LINCT  DCW   #02                                    2  3613            AREA  212
                    DCW   @PAGE@                                        4  3617            LIT   212
                    DCW   @SFX CT  LOCN  INSTRUCTION TYPE  CARD@       36  3653            LIT   213
                    DCW   @SEQ PG LIN  LABEL  OP    OPERANDS@          33  3686            LIT   214
                    DCW   @0@                                           1  3687            LIT   214
                    DCW   @ ADDR@                                       5  3692            LIT   214
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

                     DCW   @MACRO ERROR@                                11  3703              LIT   215
                     DCW   @ UNDEF ORG@                                 10  3713              LIT   215
                     DCW   @ SYM@                                        4  3717              LIT   215
               SFXCTR DCW  #01                                           1  3718              AREA  215
                     DCW   @39@                                          2  3720              LIT   215
               ROOMCT DCW  #03                                           3  3723              AREA  215
                     DCW   @039@                                         3  3726              LIT   215
               NEWSW  DCW  #01                                           1  3727              AREA  216
               COUNTR DCW  #05                                           5  3732              AREA  216
               SEQCT  DCW  #05                                           5  3737              AREA  216
               DATASW DCW  #01                                           1  3738              AREA  216
               CNVADD DCW  #05                                           5  3743              AREA  216
                     DCW   &3                                            1  3744              LIT   216
                     DCW   &WMSTR-3                                      3  3747  D08         ADCON 216
               DCSW   DCW  #01                                           1  3748              AREA  217
                     DCW   @)@                                           1  3749              LIT   217
                     DCW   &6                                            1  3750              LIT   217
                     DCW   &96                                           2  3752              LIT   217
                     DCW   @LO    ,      ,      ,      1   @            32  3784              LIT   217
                     DCW   @000@                                         3  3787              LIT   218
                     DCW   @00100104004004004004004004004004@           27  3814              LIT   218
               HOLDCT DCW  #02                                           2  3816              AREA  218
               BIGSW  DCW  #01                                           1  3817              AREA  218
               SAVEWM DCW  #05                                           5  3822              AREA  218
                     DCW   @A@                                           1  3823              LIT   218
                     DCW   @&@                                           1  3824              LIT   219
                     DCW   &80                                           2  3826              LIT   219
1357           ENDE2  DCW  @)@                                           1  3827              GMARK 219
1358           BLANK1 EQU  BLANK4-3                                        3430
1359           HOLDH  EQU  HOLDDT-52                                       3492
1360                  EX   LIBRN                                                 B 000             220
1361                  END  LIBRN                                                 / 000 080
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SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS
AD4KXT   1850    ADCON     944    ADD1     1168    ADD2     1179    ADD4     1190    ADDAGN   2725    ADDERR   2157
ADDR4K   1839    ADDRSW   3434    ADDXT    1274    ADSWXT   2305    ALT       204    ALTER      80    ALTNO    3914
ANALOG    655    ANALWK    604    AOP        70    AREADF   1183    AWMSTR   3378    BADCTL    540    BADDA    1824
BADOP    1637    BADORG   2270    BADPRO    814    BIGRN    2960    BIGSW    3817    BLANK1   3430    BLANK4   3433
BLKCT    3300    BMPERR   2328    BOP        73    BSP1      370    BSP2      414    BSP2I    2483    BSPI     2439
BYPASS   1285    BYPDA    1705    CALERR    828    CARDNO    314    CHKLG    1340    CHKLGT   3259    CHKOP    2126
CKCTL    2078    CLR      1919    CLRLEG   2620    CLRST2    683    CNDOUT   3007    CNDSW1   2633    CNVADD   3743
CNVRT    2716    CNVXT    2758    COMERR   2197    COMPWM   2629    COMXT    2185    CONDNS   2354    CONDOP    400
CONDSW   3310    CONDXT   3039    CONST    1062    CORSIZ   2632    COUNT       7    COUNTR   3732    CT        284
CTLALT   2733    CTLLIN   2738    CTLPAG   2735    CTLPNT   1042    CTLSAV   2729    CTLSW    2719    CTLSW1   2739
DA       1652    DADC     1228    DATASW   3738    DBLDEF   1513    DCSW     3748    DMOD       74    DOHEAD    818
DOIDT     862    DOJOB     843    DOPNT    1886    DOWM     2539    DS       2285    DSA       969    EDIT     2807
ENDE1    1994    ENDE2    3827    ENDIN    3998    ENDIN2   1799    ENDRTN   1008    EOJOB     928    ERRCNT   3366
ERRCT1   2689    ERRCTL   1035    ERREXT   2339    EXCUTE   1057    EXEND     794    EXIT     1311    EXOUT    1096
FIRST    2653    FIXFRM      0    FIXINP   3917+X3 FOURCH   1502    FREEXT   1386    GENSTM   1397    GET      3124
GETMAN   2222    GETORG    600    GETOV1   1963    GETOV2   3094    GM        333    GMSAVE   3372    GOOD     1096
GRPMK3   2695    HEADER   1741    HOLDA    3301    HOLDA1   2624    HOLDCT   3816    HOLDDT   3544    HOLDH    3492
IMAGE    3830    INAOP     297    INBOP     301    INDMOD    303    INIT2     201    INITAP   %U0     INOP      293
INPUT4   3831    INPUT5   3918    INST2     499    INST2I   2568    INSTR    1543    IOGEN    1390    IS12K     669
IS4K      544    IS8K      651    ISIOCS    794    JOB      3362    JOBALT   2704    JOBLAB   2715    JOBLIN   2709
JOBPAG   2706    JOBSAV   2685    JOBSW    2700    KBLK1    2627    KBLKNG   3304    KIND      309    LAB       219
LABADD     61    LABEL    3841    LGTCK    3274    LGTXT    3294    LIBRN       0    LIN       211    LINCT    3613
LINENO   3835    LITOUT   1164    LITRAL    999    LOADAD   3583    LOCN      290    LOCXT    1498    LSTAP    1201
LSTAPE   2724    LSTCD    1211    LSTOP    3370    LSTOP1   2693    MAPCNT    805    MNEMON   3850    MVDATA   2484
NEWCRD   2834    NEWSW    3727    NOCARD    992    NOCNTL   1050    NOOUT    3371    NOOUT1   2694    NUMBER   3384
NXTRCD   2381    NXTREC   3168    NXTRPT   1753    OBJCOR   3309    OBJSIZ   2721    OP         67    OPCODE    225
OPERND   3902    OPNSV1   2690    OPNTAP   2214    OPRAND    278    ORG      2212    ORGADD     32    ORGOUT   2234
ORGXT    2262    ORIGTP   %U4     ORIGXT   3255    OUTEX    1226    OUTOPN   2722    OV1GM    1417    OV2GM    1332
OVER4K    464    OVRFLO   1951    PAGENO   3832    PG        207    PHDGXT   2120    PLUS1     539    PLUS9     538
PNCHCD   2762    PNHLOC   3381    PNHXT    2887    PNT2XT   1099    PNTDA    1796    PRINT     200    PRINT2   1061
PRNTLN   1854    PRNTXT   1947    PRODC    2669    PROLIT   1041    PROSIZ   2720    PROWRK    881    PRTHDG   2000
PRTPNH   1217    PUADSW   2297    PUNCH     100    PUNCH1   1286    RDRERI   2476    RDRERR    407    READ4    1315
READ4X   1336    READCI   2783    READCT    540    READOG   3209    REDXI    2472    REDXT     403    RESET     543
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SEQCT    3737    SEQERR   3083    SETADD   1245    SETAOP    830    SETCOM   2172    SETDA    1693    SETERH    945
SETFRE   1301    SETLIT   1156    SETLOC   1418    SETOUT   2349    SETPNH   2609    SETUP     595    SFX      2343
SFXCTR   3718    SSAVE    3368    SSAVE1   2691    SSOP     1900    SSXT     1153    STLABL      2    STMBAD   1528
STSTMT      5    SUBCTI   2585    SUBCTR    516    SUFFIX    280    SUPADD     66    SUPLST   1209    SYMUND   2309
SYSTAP   %U1     TAPOP    3369    TAPOP1   2692    TPERR     334    TPERRI   2403    TPHALI   2510    TPHALT    441
TPINSI   2459    TPINST    390    TSTCON   2891    TSTCOR    900    TSTCTL    970    TSTDC    2617    TSTEND   1020
TSTFR    1466    TSTLBL   1474    TSTOP    2134    TSTPCH   2821    TSTROM   2405    TSTSIZ    407    TSTSSC   1133
TSTSSD   1143    TSTSSE   1148    TSTSSG   1138    TSTSTM   1482    TYPE       75    TYPEA    3459    TYPERR   1278
TYPESW   3458    UNDXT    2324    UNSIGN   1172    WMADDR   3578    WMLOC    3375    WMSTR    3411    WMSW     3456
WORD1    1249    WORD2    1288    WORD3    1299    WORD4    1320    WORD5    1331    WORKTP   %U5     WORKXT   3205
WRTCTI   2785    WRTCTR    542    WRTRDI   2548    WRTRED    479    WT2XT    3079    WTAP2    3043    WTAPE    2124
WTHEAD   2052    WTXT     2153    XR1        89    XR2        94    XR3        99    XTRA      924    XTRATP   %U6
XXXX        0    ZONE      189
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