TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

PROGRAM PRINTOUT OF TEST TAPE B

(4931-00-687-8511)

FOR

# COMPUTER, GUN DIRECTION, M18

(FADAC)

(1220-00-448-0131)
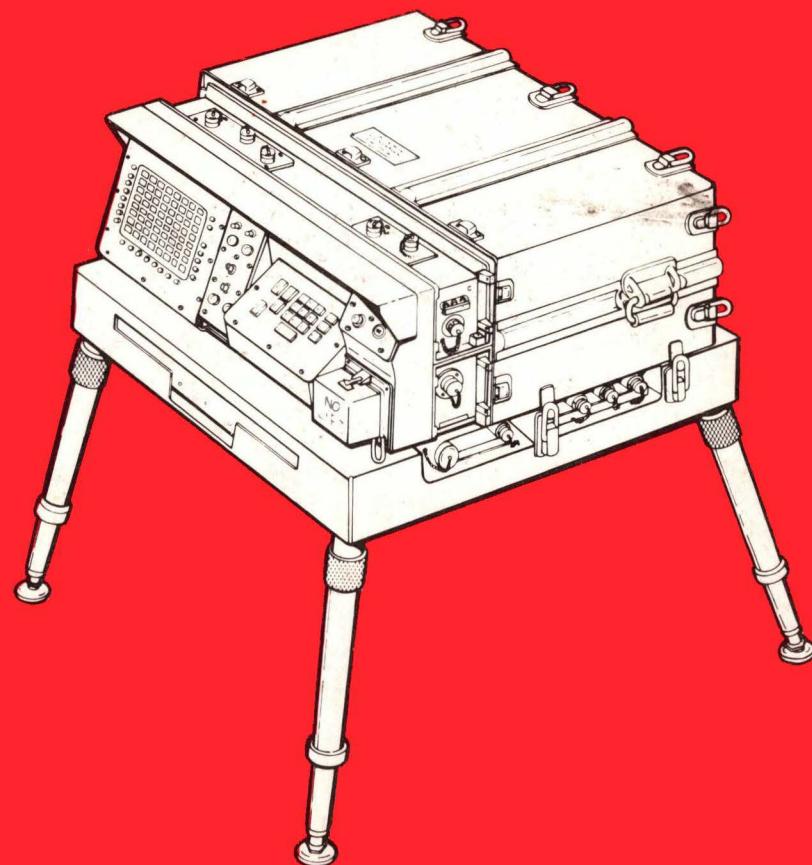
HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1981

WARNING
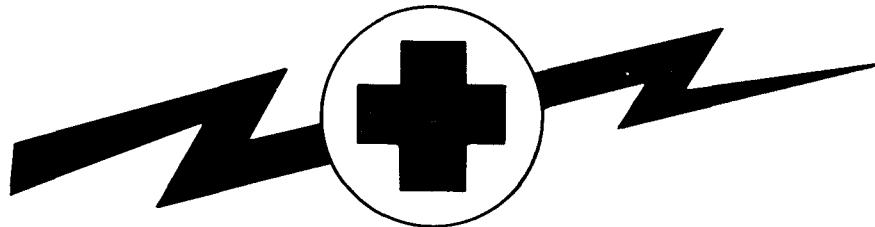
HIGH VOLTAGE

is used in the operation of this equipment.

DEATH ON CONTACT

may result if personnel fail to observe safety precautions.

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technician is aided by operators, he must warn them about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections of 220-volt ac input connections when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through vital organs of the body.

Do not be misled by the term "low voltage". Potentials as low as 50 volts may cause death.

For artificial respiration refer to FM 21-11.

Technical Manual)
)
No. 9-1220-221-34/2)

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington DC, *10 July 1981*

TEST TAPE B PROGRAM PRINTOUT
(NSN 4931-00-687-8511)
FOR
COMPUTER, GUN DIRECTION, M18
(FADAC)
(NSN 1220-00-448-0131)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a
way to improve the procedures, please let us know. Mail your letter, DA Form
2028 (Recommended Changes to Publications and Blank Forms), or DA Form
2028-2 located in the back of this manual direct to: Commander, US Army Ar-
mament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island,
IL 61299. A reply will be furnished to you.

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*This manual supersedes TM 9-1220-221-34/2, 7 July 1965, including all changes.

CHAPTER 1

INTRODUCTION

1-1. SCOPE

These instructions provide information and guidance for personnel responsible for direct support and general support maintenance of the gun direction computer M18 (FADAC). These instructions provide the current complete test tape B program printout. This printout corresponds to the information in the associated punched tape used in semiautomatic and manual isolation of malfunctions in the FADAC.

1-2. REFERENCES

a. For a general description of the FADAC and its operation and maintenance, refer to TM 9-1220-221-10-1, TM 9-1220-221-10-2, TM 9-1220-221-20&P, and TM 9-1220-221-34/1.

1-3. TAPE CARTRIDGE ASSEMBLY

a. Description and Identification. Punched paper tape is supplied in a tape cartridge 8 inches high, 9 inches wide, and 1-1/2 inches deep. The cartridge is equipped with an adjustable filler to accommodate tapes of various lengths. A number on the cartridge identifies the assembly. The tape is identified by a number printed at the start and finish of the tape.

b. Nature of Tests. When run in association with the signal data reproducer AN/GSQ-64 (SDR) and the computer logic unit test set AN/GSM-70 (FALT), the tapes provide a test of circuits within the FADAC. The circuits tested are noted in the tape program printout listed in chapter 3.

c. Assemblies Tested. If the tape stops when running a test and an error indicator flashes on the FALT, the printout should be consulted. The printout indicates the possible malfunctioning assembly or assemblies according to the test number (marker number) being performed when the error occurred.

2-2. ORGANIZATION OF THE PROGRAM PRINTOUT

a. Glossary of Special Terms and Abbreviations. Special terms and abbreviations, together with an explanation of their meaning, are listed in chapter 3.

b. Reading the Program Printout.

(1) **General instructions.** The printout is organized in 10 columns. The instructions are self-explanatory. The number in a column by itself indicates the marker number. To determine test progress, the MARKER-INDEX number is read from the FALT display. The marker number is then found in the printout (see chapter 3). All columns are read from left to right up to the index number displayed. That term in the column so determined is the command, action, or measurement in progress when the tape is stopped. Characters or other information not aligned vertically with the 10 columns are not counted in making a determination.

(2) **Example.** The ERROR indicator of the FALT flashes and the MARKER-BOARD #1 reads 345 and the INDEX-BOARD #2 reads 109. Turn to page 3-43 where marker 345 is. Find marker 345. Find the eleventh row of terms. Follow it over to the ninth term where you will find the term B2, which is the command in progress when the tape stopped.

CHAPTER 3
TEST TAPE B PROGRAM PRINTOUT

Section I. INTRODUCTION

3-1. GENERAL

Section III represents the printout of tape-programmed test B. Identification information with possible revision letters or dates is given in the opening lines of the listing, together with connection information and instructions. Check identification information in the printout against identification information on the tape. The printout must correspond to identification information on the start and finish ends of the tape.

3-2. SPECIAL TERMS AND ABBREVIATIONS

   a. The words "tape reader" refer to the SDR.

   b. The words "Manual Entry Unit" refer to the control box C-4020/GSM-70.

   c. Numbers separated by a hyphen (e.g., 015-034) refer to a marker and index number combination.

   d. Symbols followed by a hyphen (e.g., B1-) refer to the complement or inversion of the logic symbol; sometimes referred to in printed text as the prime, or followed by a prime (').

   e. The words "shorting cable" refer to the branched wiring harness. This harness has three plugs marked P10, P16, and P17 which fit corresponding receptacles on the FADAC. The harness is stored in the rear cover and is part of the FALT.

Section II. OPERATOR INSTRUCTIONS

3-3. INITIAL FALT SETUPS FOR FADAC TESTING

a. CONFIDENCE TEST switch in OFF position.

b. TEST NORMAL indicator lamp is lit.

c. DELAY START switch in OFF position.

d. PROGRAM SKIP A, B, and C switches in OFF position.

e. WR SW switch in OFF position.

f. HOMING SELECT switch in BOARD position.

g. HOMING switch in OFF position.

h. MARGINAL TEST switch in OFF position.

i. PRESET STOP switch in NORM position.

3-4. INITIAL FADAC SETUPS FOR FALT TESTING

a. The memory cable plugs P2 thru P8 are connected to the memory.

b. The FALT cables shall be connected to FADAC as follows:
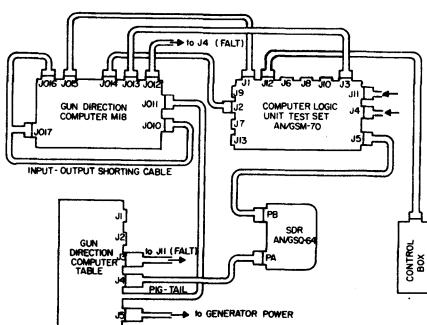
(1) FALT J4 to FADAC J12.

(2) FALT J3 to FADAC J13.

(3) FALT J2 to FADAC J14.

(4) FALT J1 to FADAC J15.

c. Depress matrix buttons A and 1.

d. Depress weapon type button 1.

e. Depress battery button A.

f. The input-output shorting cable shall be connected between J10, J16, and J17 of FADAC.

g. Energize the SDR, FALT, and FADAC in that order.

h. Check both internal and external voltages using the VOLTAGE MONITOR. Ensure that MARGINAL TEST switch on FADAC is in OFF position when checking external voltage with VOLTAGE MONITOR.

i. If an error occurs, place HOMING switch in the ON position. Place OPERATE switch to RESET position and then to TAPE position. FALT will then read the boards causing the error in MARKER BOARD #1 nixie display and continue until INDEX-BOARD #2 display reads 000. The 000 INDEX-BOARD #2 display indicates that all boards involved in the error have been displayed. Place HOMING switch in the OFF position. Replace indicated bad boards in FADAC and retest. This procedure is good through marker 339.

j. If no errors occur, the tape will halt at markers 079, 264, 339, and 730.

k. Start the tape reader.

Section III. TEST TAPE B PROGRAM PRINTOUT

Tape stops	Marker number								
	001	....OV							
		Boards 101, 240, 432							
		1SA	1TF	D7	CN6	OSA	OTF	D7	CN6
		1V							
	002	....OV							
		Board 239							
		1SA	1TP	LP	AC	OSA	OTF	LP	AC
		1V							
	003	....OV							
		Board 238							
		1SA	1TF	CFS	CN5	OSA	OTF	CFS	CN5
	004	....OV							
		Board 237							
		1SA	1TF	CN4	CPFS	OSA	OTF	CN4	CPFS
		1V							
	005	....OV							
		Board 235							
		1SA	1TF	PP	D6	OSA	OTF	PP	D6
		1V							
	006	....OV							
		Board 234							
		1SA	1TF	CP6	CP2	OSA	OTF	CP6	CP2
		1V							
	007	....OV							
		Board 233							
		1SA	1TF	CL2	CR5	OSA	OTF	CL2	CR5
		1V							
	008	....OV							
		Board 232							
		1SA	1TF	DB4	B1	OSA	OTF	DB4	B1
		1V							
	009	....OV							
		Board 231							
		1SA	1TF	D	CR7	OSA	OTF	D	CR7
		1V							

```
010  ...........................................................................................................0V
     Board 230
     1SA      1TF      DA5      DA4      0SA      0TF      DA5      DA4
     1V

011  ...........................................................................................................0V
     Boards 101, 229
     1SA      1TF      C4       1D       0SA      0TF      C4       ID
     1V

012  ...........................................................................................................0V
     Board 228
     1SA      1TF      DB6      C5       0SA      0TF      DB6      C5
     1V

013  ...........................................................................................................0V
     Board 227
     1SA      1TF      C3       CR6      0SA      0TF      C3       CR6
     1V

014  ...........................................................................................................0V
     Board 226
     1SA      1TF      DB5      B6       0SA      0TF      DB5      B6
     1V

015  ...........................................................................................................0V
     Board 224
     1SA      1TF      AK       D5       0SA      0TF      AK       D5
     1V

016  ...........................................................................................................0V
     Board 223
     1SA      1TF      D4       DP2      0SA      0TF      D4       DP2
     1V

017  ...........................................................................................................0V
     Board 222
     1SA      1TF      D5       D2       0SA      0TF      D6       D2
     1V

018  ...........................................................................................................0V
     Board 218
     1SA      1TF      LC       CL7      0SA      0TF      LC       CL7
     1V

019  ...........................................................................................................0V
     Board 217
     1SA      1TF      LX       CR4      0SA      0TF      LX       CR4
     1V
```

Tape stops	Marker number								
	020	. . . . OV							
		Board 216							
		1SA	1TF	MC	DX	OSA	OTF	MC	DX
		1V							
	021	. . . . OV							
		Boards 101, 215							
		1SA	1TF	K	DSH	OSA	OTF	K	DSH
		1V							
	022	. . . . OV							
		Board 214							
		1SA	1TF	DB3	X1	OSA	OTF	DB3	X1
		1V							
	023	. . . . OV							
		Board 213							
		1SA	1TF	CP5	DSP	OSA	OTF	CP5	DSP
		1V							
	024	. . . . OV							
		Board 212							
		1SA	1TF	DC	D8	OSA	OTF	DC	D8
		1V							
	025	. . . . OV							
		Board 211							
		1SA	1TF	G	DA3	OSA	OTF	G	DA3
		1V							
	026	. . . . OV							
		Board 210							
		1SA	1TF	MN	TP	OSA	OTF	MN	TP
		1V							
	027	. . . . OV							
		Board 209							
		1SA	1TF	PE	OB2	OSA	OTF	PE	OB2
		1V							
	028	. . . . OV							
		Board 208							
		1SA	1TF	B3	IC	OSA	OTF	B3	IC
		1V							

```
029     .................................................................................0V
        Board 207
        1SA        1TF        TX        C7        0SA        0TF        TX        C7
        1V

030     .................................................................................0V
        Board 206
        1SA        1TF        XR        CR3       0SA        0TF        XR        CR3
        1V

031     .................................................................................0V
        Boards 433, 341
        1SA        1TF        MP        OFL0
        1V

032     .................................................................................0V
        Boards 434, 341
        0SA        0TF        MP        OFL0
        1V

033     .................................................................................0V
        Board 340
        1SA        1TF        B2        DA2       0SA        0TF        B2        DA2
        1V

034     .................................................................................0V
        Board 339
        1SA        1TF        T0        CL4       0SA        0TF        T0        CL4
        1V

035     .................................................................................0V
        Board 338
        1SA        1TF        CFSW      CLC       0SA        0TF        CFSW      CLC
        1V

036     .................................................................................0V
        Board 337
        1SA        1TF        CP7       X2        0SA        0TF        CP7       X2
        1V

037     .................................................................................0V
        Board 336
        1SA        1TF        DA8       C2        0SA        0TF        DA8       C2
        1V

038     .................................................................................0V
        Board 335
        1SA        1TF        CN7       04        0SA        0TF        CN7       04
        1V
```

Tape stops	Marker number									
	039	....OV								
		Board 334								
		1SA	1TF	QX	OP3	OSA	OTF	QX	OP3	
		1V								
	040	....OV								
		Board 333								
		1SA	1TF	CN2	XD	OSA	OTF	CN2	XD	
		1V								
	041	....OV								
		Board 332								
		1SA	1TF	TSO	CN3	OSA	OTF	TSO	CN3	
		1V								
	042	....OV								
		Boards 433, 331								
		1SA	1TF	05	QC					
		1V								
	043	....OV								
		Boards 434, 331								
		OSA	OTF	05	QC					
		1V								
	044	....OV								
		Board 330								
		1SA	1TF	CL5	C6	OSA	OTF	CL5	C6	
		1V								
	045	....OV								
		Board 329								
		1SA	1TF	PN	RX	OSA	OTF	PN	RX	
		1V								
	046	....OV								
		Board 328								
		1SA	1TF	ND	CR2	OSA	OTF	ND	CR2	
		1V								
	047	....OV								
		Board 327								
		1SA	1TF	NX	NC	OSA	OTF	NX	NC	
		1V								

```
048  ....................................................................................0V
     Board 326
     1SA       1TF       RC        DA7       OSA       OTF       RC        DA7
     1V

049  ....................................................................................0V
     Board 321
     1SA       1TF       CP4       DA6       OSA       OTF       CP4       DA6
     1V

050  ....................................................................................0V
     Board 320
     1SA       1TF       AP        D3        OSA       OTF       AP        D3
     1V

051  ....................................................................................0V
     Board 319
     1SA       1TF       CP3       CP76      OSA       OTF       CP3       CP76
     1V

052  ....................................................................................0V
     Board 318
     1SA       1TF       03        OP1       OSA       OTF       03        OP1
     1V

053  ....................................................................................0V
     Boards 433, 317
     1SA       1TF       IP        CL6
     1V

054  ....................................................................................0V
     Boards 434, 317
     OSA       OTF       IP        CL6
     1V

055  ....................................................................................0V
     Board 316
     1SA       1TF       D1        XC        OSA       OTF       D1        XC
     1V

056  ....................................................................................0V
     Board 315
     1SA       1TF       E         AX        OSA       OTF       E         AX
     1V

057  ....................................................................................0V
     Board 314
     1SA       1TF       CL3       D2        OSA       OTF       CL3       D2
     1V
```

Tape stops	Marker number								
058		....0V							
		Board 441							
		1SA	1TF	B5	FS	OSA	OTF	B5	FS
		1V							
059		....0V							
		Boards 433, 440							
		1SA	1TF	B4	DA1				
		1V							
060		....0V							
		Boards 434, 440							
		OSA	OTF	B4	DA1				
		1V							
061		....0V							
		Board 439							
		1SA	1TF	.	QP	OSA	OTF	.	QP
		1V							
062		....0V							
		Board 438							
		1SA	1TF	A32	I32	OSA	OTF	A32	I32
		1V							
063		....0V							
		Board 437							
		1SA	1TF	RP	.	OSA	OTF	RP	
		1V							
064		....0V							
		Board 436							
		1SA	1TF	XP	NP	OSA	OTF	XP	NP
		1V							
065		....0V							
		Board 435							
		1SA	1TF	DP	L32	OSA	OTF	DP	L32
		1V							

NOTE
Marker 066 will indicate error if WRITE ENABLE switch is in ON position.

066 ....OV

Board 303
1SA   1TF   S   OSA   OTF   S
1V

067 ....OV

Board 304
1SA   1TF   XO   OSA   OTF   XO
1V

068 ....OV

Board 305
1SA   1TF   DO   OSA   OTF   DO
1V

069 ....OV

Board 306
1SA   1TF   RO   OSA   OTF   RO
1V

070 ....OV

Board 307
1SA   1TF   RM   OSA   OTF   RM
1V

071 ....OV

Board 308
1SA   1TF   QO   OSA   OTF   QO
1V

072 ....OV

Board 309
1SA   1TF   QM   OSA   OTF   QM
1V

073 ....OV

Board 310
1SA   1TF   NO   OSA   OTF   NO
1V

074 ....OV

Board 311
1SA   1TF   LO   OSA   OTF   LO
1V

Tape stops	Marker number								

	075	....OV							
		Board 312							
		1SA	1TF	IX	OSA	OTF	IX		
		1V							
	076	....OV							
		Board 313							
		1SA	1TF	AO	OSA	OTF	AO		
		1V							
	077	....OV							
		Board 101							
		1SA	1TF	PS	OSA	OTF	PS		
		1V							
	078	....OV							
		Board 302							
		OSA	TP	1SA	1TF	MMN	OSA	OTF	MMN
		1V							
	079	....OV							
		Board 301							
		OSA	TP	1SA	1TF	MMP	OSA	OTF	MMP
		1V							

CH	079	If a failure occurs between marker 080 and marker 264, initially replace boards called out on board readout. If the board replacement does not correct the failure, refer to special error procedure which follows:

1. If an error occurs between marker 080 and marker 264 with F1 lit and F0 not lit on FALT when the 1TF command is lit, replace board associated with marker giving the error by use of board readout procedure.

2. If F1 and F0 of FALT are both lit when the 1TF command is lit for all markers between A and B, replace board in column C.

Column A	Column B	Column C
080	095	303
096	110	435
111	128	440
129	144	318
145	159	327
160	174	333
175	189	338
190	204	208
205	219	213
220	234	222
235	249	228
250	264	234

3. Start the tape reader.

080
....0V

Board 307
1SA   S   1TF   RM
1V

081
....0V

Board 311
1TF   LO
1V

082
....0V

Board 304
1TF   XO
1V

083
....0V

Board 305
1TF   DO
1V

084
....0V

Board 306
1TF   RO
1V

085
....0V

Board 435
1TF   DP   L32
1V

Tape stops	Marker number			
086		....0V		
	Board 441			
	1TF	B5	FS	
	1V			
087		....0V		
	Board 319			
	1TF	CP3	CP76	
	1V			
088		....0V		
	Board 329			
	1TF	PN	RX	
	1V			
089		....0V		
	Board 335			
	1TF	CN7	04	
	1V			
090		....0V		
	Board 341			
	1TF	MP	OFL0	
	1V			
091		....0V		
	Board 211			
	1TF	G	DA3	
	1V			
092		....0V		
	Board 217			
	1TF	LX	CR4	
	1V			
093		....0V		
	Board 227			
	1TF	C3	CR6	
	1V			
094		....0V		
	Board 233			
	1TF	CL2	CR5	
	1V			

095 ....0V
Board 240
1TF   D7   CN6
1V

096 ....0V
Board 435
1SA   L32   1TF   DP
1V

097 ....0V
Board 307
1TF   RM
1V

098 ....0V
Board 308
1TF   Q0
1V

099 ....0V
Board 309
1TF   QM
1V

100 ....0V
Board 310
1TF   N0
1V

101 ....0V
Board 441
1TF   FS   B5
1V

102 ....0V
Board 319
1TF   CP76   CP3
1V

103 ....0V
Board 329
1TF   RX   PN
1V

104 ....0V
Board 335
1TF   04   CN7
1V

Tape stops	Marker number				
	105	....0V			
		Board 341			
		1TF	OFLO	MP	
		1V			
	106	....0V			
		Board 211			
		1TF	DA3	G	
		1V			
	107	....0V			
		Board 217			
		1TF	CR4	LX	
		1V			
	108	....0V			
		Board 227			
		1TF	CR6	C3	
		1V			
	109	....0V			
		Board 233			
		1TF	CR5	CL2	
		1V			
	110	....0V			
		Board 240			
		1TF	CN6	D7	
		1V			
	111	....0V			
		Board 440			
		1SA	B4	1TF	DA1
		1V			
	112	....0V			
		Board 441			
		1TF	B5	FS	
		1V			
	113	....0V			
		Board 439			
		1TF	.	QP	
		1V			

```
114     .................................................................................................0V
        Board 438
        1TF        A32        I32
        1V

115     .................................................................................................0V
        Board 437
        1TF        RP
        1V

116     .................................................................................................0V
        Board 436
        1TF        XP         NP
        1V

117     .................................................................................................0V
        Board 311
        1TF        L0
        1V

118     .................................................................................................0V
        Board 312
        1TF        IX
        1V

119     .................................................................................................0V
        Board 313
        1TF        A0
        1V

120     .................................................................................................0V
        Board 318
        1TF        03         OP1
        1V

121     .................................................................................................0V
        Board 328
        1TF        ND         CR2
        1V

122     .................................................................................................0V
        Board 334
        1TF        QX         OP3
        1V

123     .................................................................................................0V
        Board 340
        1TF        B2         DA2
        1V
```

Tape stops	Marker number				
	124	....0V			
		Board 210			
		1TF	MN	TP	
		1V			
	125	....0V			
		Board 216			
		1TF	MC	DX	
		1V			
	126	....0V			
		Board 226			
		1TF	OB5	B6	
		1V			
	127	....0V			
		Board 232			
		1TF	OB4	B1	
		1V			
	128	....0V			
		Board 239			
		1TF	LP	AC	
		1V			
	129	....0V			
		Board 318			
		1SA	OP1	1TF	03
		1V			
	130	....0V			
		Board 319			
		1TF	CP3	CP76	
		1V			
	131	....0V			
		Board 317			
		1TF	IP	CL6	
		1V			
	132	....0V			
		Board 316			
		1TF	D1	XC	
		1V			

133 ....0V
Board 315
1TF   E   AX
1V

134 ....0V
Board 314
1TF   CL3   D2
1V

135 ....0V
Board 440
1TF   DA1   B4
1V

136 ....0V
Board 101
1TF   PS
1V

137 ....0V
Board 328
1TF   CR2   ND
1V

138 ....0V
Board 334
1TF   OP3   QX
1V

139 ....0V
Board 340
1TF   DA2   B2
1V

140 ....0V
Board 210
1TF   TP   MN
1V

141 ....0V
Board 216
1TF   DX   MC
1V

Tape stops	Marker number				
	142	....0V			
		Board 226			
		1TF	B6	OB5	
		1V			
	143	....0V			
		Board 232			
		1TF	B1	OB4	
		1V			
	144	....0V			
		Board 239			
		1TF	AC	Lp	
		1V			
	145	....0V			
		Board 327			
		1SA	NX	1TF	NC
		1V			
	146	....0V			
		Board 329			
		1TF	PN	RX	
		1V			
	147	....0V			
		Board 328			
		1TF	ND	CR2	
		1V			
	148	....0V			
		Board 326			
		1TF	RC	DA7	
		1V			
	149	....0V			
		Board 321			
		1TF	CP4	DA6	
		1V			
	150	....0V			
		Board 320			
		1TF	AP	D3	
		1V			

151 ....0V
Board 439
1TF   .   QP
1V

152 ....0V
Board 317
1TF   IP   CL6
1V

153 ....0V
Board 333
1TF   CN2   XD
1V

154 ....0V
Board 339
1TF   TO   CL4
1V

155 ....0V
Board 209
1TF   PE   OB2
1V

156 ....0V
Board 215
1TF   K   DSH
1V

157 ....0V
Board 224
1TF   AK   D5
1V

158 ....0V
Board 231
1TF   D   CR7
1V

159 ....0V
Board 238
1TF   CFS   CN5
1V

160 ....0V
Board 333
1SA   XD   1TF   CN2
1V

Tape stops	Marker number			
	161	....0V		
		Board 335		
		1TF	CN7	04
		1V		
	162	....0V		
		Board 334		
		1TF	QX	0P3
		1V		
	163	....0V		
		Board 332		
		1TF	TS0	CN3
		1V		
	164	....0V		
		Board 331		
		1TF	05	QC
		1V		
	165	....0V		
		Board 330		
		1TF	CL5	C6
		1V		
	166	....0V		
		Board 439		
		1TF	QP	
		1V		
	167	....0V		
		Board 317		
		1TF	CL6	IP
		1V		
	168	....0V		
		Board 327		
		1TF	NC	NX
		1V		
	169	....0V		
		Board 339		
		1TF	CL4	T0
		1V		

170 ....OV
    Board 209
    1TF   OB2   PE
    1V

171 ....OV
    Board 215
    1TF   DSH   K
    1V

172 ....OV
    Board 224
    1TF   D5   AK
    1V

173 ....OV
    Board 231
    1TF   CR7   D
    1V

174 ....OV
    Board 238
    1TF   CN5   CFS
    1V

175 ....OV
    Board 338
    1SA   CFSW   1TF   CLC
    1V

176 ....OV
    Board 341
    1TF   MP   OFLO
    1V

177 ....OV
    Board 340
    1TF   B2   DA2
    1V

178 ....OV
    Board 339
    1TF   TO   CL4
    1V

179 ....OV
    Board 337
    1TF   CP7   X2
    1V

Tape stops	Marker number			
	180	....0V		
		Board 336		
		1TF	DA8	C2
		1V		
	181	....0V		
		Board 438		
		1TF	A32	I32
		1V		
	182	....0V		
		Board 316		
		1TF	D1	XC
		1V		
	183	....0V		
		Board 326		
		1TF	RC	DA7
		1V		
	184	....0V		
		Board 332		
		1TF	TS0	CN3
		1V		
	185	....0V		
		Board 208		
		1TF	B3	IC
		1V		
	186	....0V		
		Board 214		
		1TF	OB3	X1
		1V		
	187	....0V		
		Board 223		
		1TF	D4	OP2
		1V		
	188	....0V		
		Board 230		
		1TF	DA5	DA4
		1V		

189 ....0V
    Board 237
    1TF   CN4   CPFS
    1V

190 ....0V
    Board 208
    1SA   IC   B3
    1V

191 ....0V
    Board 211
    1TF   G   DA3
    1V

192 ....0V
    Board 210
    1TF   MN   TP
    1V

193 ....0V
    Board 209
    1TF   PE   OB2
    1V

194 ....0V
    Board 207
    1TF   TX   C7
    1V

195 ....0V
    Board 206
    1TF   XR   CR3
    1V

196 ....0V
    Board 438
    1TF   I32   A32
    1V

197 ....0V
    Board 316
    1TF   XC   D1
    1V

198 ....0V
    Board 326
    1TF   DA7   RC
    1V

Tape stops	Marker number				
	199	....0V			
		Board 332			
		1TF	CN3	TS0	
		1V			
	200	....0V			
		Board 338			
		1TF	CLC	CFSW	
		1V			
	201	....0V			
		Board 214			
		1TF	X1	OB3	
		1V			
	202	....0V			
		Board 223			
		1TF	OP2	D4	
		1V			
	203	....0V			
		Board 230			
		1TF	DA4	DA5	
		1V			
	204	....0V			
		Board 237			
		1TF	CPFS	CN4	
		1V			
	205	....0V			
		Board 213			
		1SA	CP5	1TF	DSP
		1V			
	206	....0V			
		Board 217			
		1TF	LX	CR4	
		1V			
	207	....0V			
		Board 216			
		1TF	MC	DX	
		1V			

208 ....0V
Board 215
1TF   K   DSH
1V

209 ....Nc..0V
Board 214
1TF   OB3   X1
1V

210 ....0V
Board 212
1TF   DC   D8
1V

211 ....0V
Board 437
1TF   RP
1V

212 ....0V
Board 315
1TF   E   AX
1V

213 ....0V
Board 321
1TF   CP4   DA6
1V

214 ....0V
Board 331
1TF   05   QC
1V

215 ....0V
Board 337
1TF   CP7   X2
1V

216 ....0V
Board 207
1TF   TX   C7
1V

217 ....0V
Board 222
1TF   06   02
1V

Tape stops	Marker number				
	218	....0V			
		Board 229			
		1TF	C4	ID	
		1V			
	219	....0V			
		Board 235			
		1TF	PP	D6	
		1V			
	220	....0V			
		Board 222			
		1SA	02	1TF	06
		1V			
	221	....0V			
		Board 227			
		1TF	C3	CR6	
		1V			
	222	....0V			
		Board 226			
		1TF	OB5	B6	
		1V			
	223	....0V			
		Board 224			
		1TF	AK	D5	
		1V			
	224	....0V			
		Board 223			
		1TF	D4	OP2	
		1V			
	225	....0V			
		Board 218			
		1TF	LC	CL7	
		1V			
	226	....0V			
		Board 437			
		1TF	.	RP	
		1V			

227 ....0V
Board 315
1TF   AX   E
1V

228 ....0V
Board 321
1TF   DA6   CP4
1V

229 ....0V
Board 331
1TF   QC   05
1V

230 ....0V
Board 337
1TF   X2   CP7
1V

231 ....0V
Board 207
1TF   C7   TX
1V

232 ....0V
Board 213
1TF   DSP   CP5
1V

233 ....0V
Board 229
1TF   ID   C4
1V

234 ....0V
Board 235
1TF   D6   PP
1V

235 ....0V
Board 228
1SA   OB6   C5
1V

236 ....0V
Board 233
1TF   CL2   CR5
1V

Tape
stops

Marker
number

237 ....OV
Board 232
1TF   OB4   B1
1V

238 ....OV
Board 231
1TF   D   CR7
1V

239 ....OV
Board 230
1TF   DA5   DA4
1V

240 ....OV
Board 229
1TF   C4   ID
1V

241 ....OV
Board 436
1TF   XP   NP
1V

242 ....OV
Board 314
1TF   CL3   D2
1V

243 ....OV
Board 320
1TF   AP   .   D3
1V

244 ....OV
Board 330
1TF   CL5   C6
1V

245 ....OV
Board 336
1TF   ····DA8   C2
1V

```
246    .......................................................................................0V
       Board 206
       1TF          XR          CR3
       1V

247    ............UV...........................................................................0V
       Board 212
       1TF          DC          D8
       1V

248    .......................................................................................0V
       Board 218
       1TF          LC          CL7
       1V

249    .......................................................................................0V
       Board 234
       1TF          CP6         CP2
       1V

250    .......................................................................................0V
       Board 234
       1SA          CP2         1TF         CP6
       1V

251    .......................................................................................0V
       Board 240
       1TF          D7          CN6
       1V

252    .......................................................................................0V
       Board 239
       1TF          LP          AC
       1V

253    .......................................................................................0V
       Board 238
       1TF          CFS         CN5
       1V

254    .......................................................................................0V
       Board 237
       1TF          CN4         CPFS
       1V

255    .......................................................................................0V
       Board 235
       1TF          PP          D6
       1V
```

Tape stops	Marker number			

256 ....0V
Board 436
1TF   NP   XP
1V

257 ....0V
Board 314
1TF   D2   CL3
1V

258 ....0V
Board 320
1TF   D3   AP
1V

259 ....0V
Board 330
1TF   C6   CL5
1V

260 ....0V
Board 336
1TF   C2   DA8
1V

261 ....0V
Board 206
1TF   CR3   XR
1V

262 ....0V
Board 212
1TF   D8   DC
1V

263 ....0V
Board 218
1TF   CL7   LC
1V

```
264        ...................................................................................................OV
           Board 228
           1TF        C5         OB6
           1V

CH   264   From marker 265 to marker 339 replace board called out on board readout.  Special error
           procedure given at marker 079 for errors between markers 080 and 264 does not apply.

           Start tape reader.

265        ...................................................................................................OV
           Board 240
           1SA        D7         1TF        CN6        1SA        CN6        1TF        D7
           OSA        D7         OTF        CN6        OSA        CN6        OTF        D7
           1V

266        ...................................................................................................OV
           Board 239
           1SA        LP         1TF        AC         1SA        AC         1TF        LP
           OSA        LP         OTF        AC         OSA        AC         OTF        LP
           1V

267        ...................................................................................................OV
           Board 238
           1SA        CFS        1TF        CN5        1SA        CN5        1TF        CFS
           OSA        CFS        OTF        CN5        OSA        CN5        OTF        CFS
           1V

268        ...................................................................................................OV
           Board 237
           1SA        CN4        1TF        CPFS       1SA        CPFS       1TF        CN4
           OSA        CN4        OTF        CPFS       OSA        CPFS       OTF        CN4
           1V

269        ...................................................................................................OV
           Board 235
           1SA        PP         1TF        D6         1SA        D6         1TF        PP
           OSA        PP         OTF        D6         OSA        D6         OTF        PP
           1V

270        ...................................................................................................OV
           Board 234
           1SA        CP6        1TF        CP2        1SA        CP2        1TF        CP6
           OSA        CP6        OTF        CP2        OSA        CP2        OTF        CP6
           1V
```

Tape stops	Marker number							
	271							OV
		Board 233						
		1SA	CL2	1TF	CR5	1SA	CR5	1TF	CL2
		OSA	CL2	OTF	CR5	OSA	CR5	OTF	CL2
		1V						
	272							OV
		Board 232						
		1SA	OB4	1TF	B1	1SA	B1	1TF	OB4
		OSA	OB4	OTF	B1	OSA	B1	OTF	OB4
		1V						
	273							OV
		Board 231						
		1SA	D	1TF	CR7	1SA	CR7	1TF	D
		OSA	D	OTF	CR7	OSA	CR7	OTF	D
		1V						
	274							OV
		Board 230						
		1SA	DA5	1TF	DA4	1SA	DA4	1TF	DA5
		OSA	DA5	OTF	DA4	OSA	DA4	OTF	DA5
		1V						
	275							OV
		Board 229						
		1SA	C4	1TF	ID	1SA	ID	1TF	C4
		OSA	C4	OTF	ID	OSA	ID	OTF	C4
		1V						
	276							OV
		Board 228						
		1SA	OB6	1TF	C5	1SA	C5	1TF	OB6
		OSA	OB6	OTF	C5	OSA	C5	OTF	OB6
		1V						
	277							OV
		Board 227						
		1SA	C3	1TF	CR6	1SA	CR6	1TF	C3
		OSA	C3	OTF	CR6	OSA	CR6	OTF	C3
		1V						

```
278 ...................................................................................................OV
    Board 226
    1SA      0B5       1TF      B6        1SA      B6        1TF      0B5
    0SA      0B5       0TF      B6        0SA      B6        0TF      0B5
    1V

279 ...................................................................................................OV
    Board 224
    1SA      AK        1TF      D5        1SA      D5        1TF      AK
    0SA      AK        0TF      D5        0SA      D5        0TF      AK
    1V

280 ...................................................................................................OV
    Board 223
    1SA      D4        1TF      OP2       1SA      OP2       1TF      D4
    0SA      D4        0TF      OP2       0SA      OP2       0TF      D4
    1V

281 ...................................................................................................OV
    Board 222
    1SA      06        1TF      02.       1SA      02        1TF      06
    0SA      06        0TF      02        0SA      02        0TF      06
    1V

282 ...................................................................................................OV
    Board 218
    1SA      LC        1TF      CL7       1SA      CL7       1TF      LC
    0SA      LC        0TF      CL7       0SA      CL7       0TF      LC
    1V

283 ...................................................................................................OV
    Board 217
    1SA      LX        1TF      CR4       1SA      CR4       1TF      LX
    0SA      LX        0TF      CR4       0SA      CR4       0TF      LX
    1V

284 ...................................................................................................OV
    Board 216
    1SA      MC        1TF      DX        1SA      DX        1TF      MC
    0SA      MC        0TF      DX        0SA      DX        0TF      MC
    1V

285 ...................................................................................................OV
    Board 215
    1SA      K         1TF      DSH       1SA      DSH       1TF      K
    0SA      K         0TF      DSH       0SA      DSH       0TF      K
    1V
```

Tape stops	Marker number							

286	....0V

Board 214

1SA	OB3	1TF	X1	1SA	X1	1TF	OB3
OSA	OB3	OTF	X1	OSA	X1	OTF	OB3
1V							

287	....0V

Board 213

1SA	CP5	1TF	DSP	1SA	DSP	1TF	CP5
OSA	CP5	OTF	DSP	OSA	DSP	OTF	CP5
1V							

288	....0V

Board 212

1SA	DC	1TF	D8	1SA	D8	1TF	DC
OSA	DC	OTF	D8	OSA	D8	OTF	DC
1V							

289	....0V

Board 211

1SA	G	1TF	DA3	1SA	DA3	1TF	G
OSA	G	OTF	DA3	OSA	DA3	OTF	G
1V							

290	....0V

Board 210

1SA	MN	1TF	TP	1SA	TP	1TF	MN
OSA	MN	OTF	TP	OSA	TP	OTF	MN
1V							

291	....0V

Board 209

1SA	PE	1TF	OB2	1SA	OB2	1TF	PE
OSA	PE	OTF	OB2	OSA	OB2	OTF	PE
1V							

292	....0V

Board 208

1SA	B3	1TF	IC	1SA	IC	1TF	B3
OSA	B3	OTF	IC	OSA	IC	OTF	B3
1V							

```
293  ..............................................................................................OV
     Board 207
     1SA      TX      1TF      C7       1SA      C7       1TF      TX
     0SA      TX      0TF      C7       0SA      C7       0TF      TX
     1V

294  ..............................................................................................OV
     Board 206
     1SA      XR      1TF      CR3      1SA      CR3      1TF      XR
     0SA      XR      0TF      CR3      0SA      CR3      0TF      XR
     1V

295  ..............................................................................................OV
     Board 341
     1SA      MP      1TF      OFLO     1SA      OFLO     1TF      MP
     0SA      MP      0TF      OFLO     0SA      OFLO     0TF      MP
     1V

296  ..............................................................................................OV
     Board 340
     1SA      B2      1TF      DA2      1SA      DA2      1TF      B2
     0SA      B2      0TF      DA2      0SA      DA2      0TF      B2
     1V

297  ..............................................................................................OV
     Board 339
     1SA      TO      1TF      CL4      1SA      CL4      1TF      TO
     0SA      TO      0TF      CL4      0SA      CL4      0TF      TO
     1V

298  ..............................................................................................OV
     Board 338
     1SA      CFSW    1TF      CLC      1SA      CLC      1TF      CFSW
     0SA      CFSW    0TF      CLC      0SA      CLC      0TF      CFSW
     1V

299  ..............................................................................................OV
     Board 337
     1SA      CP7     1TF      X2       1SA      X2       1TF      CP7
     0SA      CP7     0TF      X2       0SA      X2       0TF      CP7
     1V

300  ..............................................................................................OV
     Board 336
     1SA      DA8     1TF      C2       1SA      C2       1TF      DA8
     0SA      DA8     0TF      C2       0SA      C2       0TF      DA8
     1V
```

Tape stops	Marker number							
301	....0V							
	Board 329							
	1SA	PN	1TF	RX	1SA	RX	1TF	PN
	0SA	PN	0TF	RX	0SA	RX	0TF	PN
	1V							
302	....0V							
	Board 328							
	1SA	ND	1TF	CR2	1SA	CR2	1TF	ND
	0SA	ND	0TF	CR2	0SA	CR2	0TF	ND
	1V							
303	....0V							
	Board 327							
	1SA	NX	1TF	NC	1SA	NC	1TF	NX
	0SA	NX	0TF	NC	0SA	NC	0TF	NX
	1V							
304	....0V							
	Board 326							
	1SA	RC	1TF	DA7	1SA	DA7	1TF	RC
	0SA	RC	0TF	DA7	0SA	DA7	0TF	RC
	1V							
305	....0V							
	Board 321							
	1SA	CP4	1TF	DA6	1SA	DA6	1TF	CP4
	0SA	CP4	0TF	DA6	0SA	DA6	0TF	CP4
	1V							
306	....0V							
	Board 320							
	1SA	AP	1TF	D3	1SA	D3	1TF	AP
	0SA	AP	0TF	D3	0SA	D3	0TF	AP
	1V							
307	....0V							
	Board 335							
	1SA	CN7	1TF	04	1SA	04	1TF	CN7
	0SA	CN7	0TF	04	0SA	04	0TF	CN7
	1V							

308								OV
	Board 334							
	1SA	QX	1TF	OP3	1SA	OP3	1TF	QX
	OSA	QX	OTF	OP3	OSA	OP3	OTF	QX
	1V							
309	Board 333							
	1SA	CN2	1TF	XD	1SA	XD	1TF	CN2
	OSA	CN2	OTF	XD	OSA	XD	OTF	CN2
	1V							
310								OV
	Board 332							
	1SA	TS0	1TF	CN3	1SA	CN3	1TF	TS0
	OSA	TS0	OTF	CN3	OSA	CN3	OTF	TS0
	1V							
311								OV
	Board 331							
	1SA	05	1TF	QC	1SA	QC	1TF	05
	OSA	05	OTF	QC	OSA	QC	OTF	05
	1V							
312								OV
	Board 330							
	1SA	CL5	1TF	C6	1SA	C6	1TF	CL5
	OSA	CL5	OTF	C6	OSA	C6	OTF	CL5
	1V							
313								OV
	Board 319							
	1SA	CP3	1TF	CP76	1SA	CP76	1TF	CP3
	OSA	CP3	OTF	CP76	OSA	CP76	OTF	CP3
	1V							
314								OV
	Board 318							
	1SA	03	1TF	OP1	1SA	OP1	1TF	03
	OSA	03	OTF	OP1	OSA	OP1	OTF	03
	1V							
315								OV
	Board 317							
	1SA	IP	1TF	CL6	1SA	CL6	1TF	IP
	OSA	IP	OTF	CL6	OSA	CL6	OTF	IP
	1V							

Tape stops	Marker number								
	316	....0V							
		Board 316							
		1SA	D1	1TF	XC	1SA	XC	1TF	D1
		0SA	D1	0TF	XC	0SA	XC	0TF	D1
		1V							
	317	....0V							
		Board 315							
		1SA	E	1TF	AX	1SA	AX	1TF	E
		0SA	E	0TF	AX	0SA	AX	0TF	E
		1V							
	318	....0V							
		Board 314							
		1SA	CL3	1TF	D2	1SA	D2	1TF	CL3
		0SA	CL3	0TF	D2	0SA	D2	0TF	CL3
		1V							
	319	....0V							
		Board 441							
		1SA	B5	1TF	FS	1SA	FS	1TF	B5
		0SA	B5	0TF	FS	0SA	FS	0TF	B5
		1V							
	320	....0V							
		Board 440							
		1SA	B4	1TF	DA1	1SA	DA1	1TF	B4
		0SA	B4	0TF	DA1	0SA	DA1	0TF	B4
		1V							
	321	....0V							
		Board 439							
		1SA	.	1TF	QP	1SA	QP		
		0SA	.	0TF	QP	0SA	QP		
		1V							
	322	....0V							
		Board 438							
		1SA	A32	1TF	I32	1SA	I32	1TF	A32
		0SA	A32	0TF	I32	0SA	I32	0TF	A32
		1V							
	323	....0V							
		Board 437							
		1SA	RP	.	.	1SA	.	1TF	RP
		0SA	RP	.	.	0SA	.	0TF	RP
		1V							

```
324    ...................................................................................................0V
       Board 436
       1SA      XP        1TF      NP        1SA      NP        1TF      XP
       OSA      XP        OTF      NP        OSA      NP        OTF      XP
       1V

325    ...................................................................................................0V
       Board 435
       1SA      DP        1TF      L32       1SA      L32       1TF      DP
       OSA      DP        OTF      L32       OSA      L32       OTF      DP
       1V

326    ...................................................................................................0V
       Board 301
       OSA      MMP       1SA      MMP
       1V

327    ...................................................................................................0V
       Board 302
       OSA      MMN       1SA      MMN
       1V

328    ...................................................................................................0V
       Board 303
       OSA      S         1SA      S
       1V

329    ...................................................................................................0V
       Board 304
       OSA      X0        1SA      X0
       1V

330    ...................................................................................................0V
       Board 305
       OSA      D0        1SA      D0
       1V

331    ...................................................................................................0V
       Board 306
       OSA      R0        1SA      R0
       1V

332    ...................................................................................................0V
       Board 307
       OSA      RM        1SA      RM
       1V

333    ...................................................................................................0V
       Board 308
       OSA      Q0        1SA      Q0
       1V
```

Tape stops	Marker number									

	334	....OV

Board 309
OSA   QM   1SA   QM
1V

	335	....OV

Board 310
OSA   NO   1SA   NO
1V

	336	....OV

Board 311
OSA   LO   1SA   LO
1V

	337	....OV

Board 312
OSA   IX   1SA   IX
1V

	338	....OV

Board 313
OSA   AO   1SA   AO
1V

	339	....OV

Board 101
OSA   PS   1SA   PS
1V

CH   339   Do not use the error procedure given in part 1 of this tape for the remaining FADAC test tapes C, D, E.

Error procedure: Under each marker number is a list of the FADAC boards and/or associated equipment causing the error. Replace the boards and/or equipment listed and recheck the FADAC computer by rerunning this tape.

A special error procedure for markers 340 thru 347 is provided in section IV.

Start the tape reader.

1V	1E18								

340	1SA	TX	AK	AX	B5	B3	B1	CFSW	CL6	CL4
	CL2	CP6	CP4	CP2	CN7	CN5	CN3	CR7	CR5	CR3
	C7	C5	C3	DC	DSH	D8	D6	DA8	DA6	DA4
	DA2	D4	D2	D	FS	IC	IP	LC	LX	MN
	NC	CN2	OB6	OB4	OB2	OP3	OP1	O5	O3	PE
	PP	QX	RX	TP	XD	X2	CLC	DP	L32	QP
	XP	DO	LO	RO	QO	S	MMN	1TF	TO	AC
	AP	B6	B4	B2	CFS	CL7	CL5	CL3	CP7	CP5
	CP3	CP76	CN6	CN4	CPFS	CR6	CR4	CR2	C6	C4

341	C2	DX	DSP	D7	D5	DA7	DA5	DA3	DA1	D3
	D1	E	G	ID	K	LP	MC	MP	ND	NX
	OB5	OB3	OFLO	OP2	06	04	02	PN	QC	RC
	TS0	XC	XR	X1	A32	I32	NP	RP	A0	IX
	NO	RM	QM	X0	MMP	·	·	·	·	·
	·	·	·	·	·	·	·	·	·	·
	OSA	TP	·	·	·	·	·	·	1SA	TX
	AC	AX	B6	B3	B2	CFSW	CL7	CL4	CL3	CP6
	CP5	CP2	CP76	CN5	CN4	CR7	CR6	CR3	CR2	C5
	C4	DC	DX	D8	D7	DA8	DA7	DA4	DA3	D4
	D3	D	E	IC	ID	LC	LP	MN	MP	CN2
	NX	OB4	OB3	OP3	OP2	05	04	PE	PN	QX
	RC	TP	XC	X2	X1	DP	I32	QP	RP	D0
	IX	RO	RM	S	X0	1TF	TO	AK	AP	B5
	B4	B1	CFS	CL6	CL5	CL2	CP7	CP4	CP3	CN7
	CN6	CN3	CPFS	CR5	CR4	C7	C6	C3	C2	DSH
	DSP	D6	D5	DA6	DA5	DA2	DA1	D2	D1	FS
	G	IP	K	LX	MC	NC	ND	OB6	OB5	OB2
342	OFLO	OP1	06	03	02	PP	QC	RX	TS0	XD
	XR	CLC	A32	L32	NP	XP	A0	LO	NO	Q0
	QM	MMN	MMP	·	·	·	1SA	TX	AC	AK
	AP	B3	B2	B1	CFS	CL4	CL3	CL2	CP7	CP2
	CP76	CN7	CN6	CR7	CR6	CR5	CR4	C5	C4	C3
	C2	D8	D7	D6	D5	DA4	DA3	DA2	DA1	D
	E	FS	G	LC	LP	LX	MC	CN2	NX	OB6
	OB5	OP3	OP2	OP1	06	PE	PN	PP	QC	TP
	XC	XD	XR	DP	I32	L32	NP	D0	IX	LO
	NO	S	X0	MMN	MMP	1TF	TO	AX	B6	B5
	B4	CFSW	CL7	CL6	CL5	CP6	CP5	CP4	CP3	CN5
	CN4	CN3	CPFS	CR3	CR2	C7	C6	DC	DX	DSH
	DSP	DA8	DA7	DA6	DA5	D4	D3	D2	D1	IC
	ID	IP	K	MN	MP	NC	ND	OB4	OB3	OB2
	OFLO	05	04	03	02	QX	RC	RX	TS0	X2
	X1	CLC	A32	QP	RP	XP	A0	RO	RM	Q0
343	QM	·	·	·	1SA	TX	AC	AK	AP	AX
	B6	B5	B4	CL4	CL3	CL2	CP7	CP6	CP5	CP4
	CP3	CR7	CR6	CR5	CR4	CR3	CR2	C7	C6	D8
	D7	D6	D5	DA8	DA7	DA6	DA5	D	E	FS
	G	IC	ID	IP	K	CN2	NX	OB6	OB5	OB4
	OB3	OB2	OFLO	PE	PN	PP	QC	QX	RC	RX
	TS0	DP	I32	L32	NP	QP	RP	XP	A0	S
	X0	MMN	MMP	1TF	TO	B3	B2	B1	CFS	CFSW
	CL7	CL6	CL5	CP2	CP76	CN7	CN6	CN5	CN4	CN3
	CPFS	C5	C4	C3	C2	DC	DX	DSH	DSP	DA4
	DA3	DA2	DA1	D4	D3	D2	D1	LC	LP	LX
	MC	MN	MP	NC	ND	OP3	OP2	OP1	06	05
	04	03	02	TP	XC	XD	XR	X2	X1	CLC
	A32	D0	IX	LO	NO	RO	RM	Q0	QM	·
	·	·	1SA	TX	AC	AK	AP	AX	B6	B5
	B4	B3	B2	B1	CFS	CFSW	CL7	CL6	CL5	CR7

Tape stops	Marker number									
	344	CR6	CR5	CR4	CR3	CR2	C7	C6	C5	C4	C3
		C2	DC	DX	DSH	DSP	D	E	FS	G	IC
		ID	IP	K	LC	LP	LX	MC	MN	MP	NC
		ND	PE	PN	PP	QC	QX	RC	RX	TSO	TP
		XC	XD	XR	X2	X1	CLC	A32	S	XO	MMN
		MMP	1TF	TO	CL4	CL3	CL2	CP7	CP6	CP5	CP4
		CP3	CP2	CP76	CN7	CN6	CN5	CN4	CN3	CPFS	D8
		D7	D6	D5	DA8	DA7	DA6	DA5	DA4	DA3	DA2
		DA1	D4	D3	D2	D1	CN2	NX	OB6	OB5	OB4
		OB3	OB2	OFLO	OP3	OP2	OP1	06	05	04	03
		02	DP	I32	L32	NP	QP	RP	XP	AO	DO
		IX	LO	NO	RO	RM	QO	QM	.	.	.
		1SA	TX	AC	AK	AP	AX	B6	B5	B4	B3
		B2	B1	CFS	CFSW	CL7	CL6	CL5	CL4	CL3	CL2
		CP7	CP6	CP5	CP4	CP3	CP2	CP76	CN7	CN6	CN5
		CN4	CN3	CPFS	D	E	FS	G	IC	ID	IP
	345	K	LC	LP	LX	MC	MN	MP	NC	ND	CN2
		NX	OB6	OB5	OB4	OB3	OB2	OFLO	OP3	OP2	OP1
		06	05	04	03	02	S	XO	MMN	MMP	1TF
		TO	CR7	CR6	CR5	CR4	CR3	CR2	C7	C6	C5
		C4	C3	C2	DC	CX	DSH	DSP	D8	D7	D6
		D5	DA8	DA7	DA6	DA5	DA4	DA3	DA2	DA1	D4
		D3	D2	D1	PE	PN	PP	QC	QX	RC	RX
		TSO	TP	XC	XD	XR	X2	X1	CLC	A32	DP
		I32	L32	NP	QP	RP	XP	AO	DO	IX	LO
		NO	RO	RM	QO	QM	.	.	.	1SA	TX
		AC	AK	AP	AX	B6	B5	B4	B3	B2	B1
		CFS	CFSW	CL7	CL6	CL5	CL4	CL3	CL2	CP7	CP6
		CP5	CP4	CP3	CP2	CP76	CN7	CN6	CN5	CN4	CN3
		CPFS	CR7	CR6	CR5	CR4	CR3	CR2	C7	C6	C5
		C4	C3	C2	DC	DX	DSH	DSP	D8	D7	D6
		D5	DA8	DA7	DA6	DA5	DA4	DA3	DA2	DA1	D4
	346	D3	D2	D1	S	XO	MMN	MMP	1TF	TO	D
		E	FS	G	IC	ID	IP	K	LC	LP	LX
		MC	MN	MP	NC	ND	CN2	NX	OB6	OB5	OB4
		OB3	OB2	OFLO	OP3	OP2	OP1	06	05	04	03
		02	PE	PN	PP	QC	QX	RC	RX	TSO	TP
		XC	XD	XR	X2	X1	CLC	A32	DP	I32	L32
		NP	QP	RP	XP	AO	DO	IX	LO	NO	RO
		RM	QO	QM	.	.	.	1SA	TO	AC	AP
		B6	B4	B2	CFS	CL7	CL5	CL3	CP7	CP5	CP3
		CP76	CN6	CN4	CPFS	CR6	CR4	CR2	C6	C4	C2
		DX	DSP	D7	D5	DA7	DA5	DA3	DA1	D3	D1

E	G	ID	K	LP	MC	MP	ND	NX	OB5
OB3	OFLO	OP2	06	04	02	PN	QC	RC	TSO
XC	XR	X1	A32	I32	NP	RP	AO	IX	NO
RM	QM	XO	MMP	1TF	TX	AK	AX	B5	B3
B1	CFSW	CL6	CL4	CL2	CP6	CP4	CP2	CN7	CN5

347									
CN3	CR7	CR5	CR3	C7	C5	C3	DC	DSH	D8
D6	DA8	DA6	DA4	DA2	D4	D2	D	FS	IC
IP	LC	LX	MN	NC	CN2	OB6	OB4	OB2	OP3
OP1	05	03	PE	PP	QX	RX	TP	XD	X2
CLC	DP	L32	QP	XP	DO	LO	RO	QO	S
MMN	.	.	.	.	.	.	.	.	.

NOTE

Some of the logic driver circuits in FADAC are connected so that FALT can test them by means of the AP line. This tape tests the logic feeding those addressable logic drivers.

348	Logic for KD1 is on boards 236, 237.										
OSA	D	1TA	KD1	.	01	.	.	.	.	.
1SA	K	1TA	KD1	.	01	.	.	.	.	.
1SA	OTA	KD1	.	01	K-	.	.	.	.	.
1SA	D	K	OTA	KD1	.	01	D	.	.	.

349	Logic for KED2 is on boards 218, 219.										
OSA	E	1TA	KED2	.	01	.	.	.	.	.
1SA	D	K	1TA	KED2	.	01	.	.	.	.
1SA	D	OTA	KED2	.	01	K-	.	.	.	.
1SA	D	E	K	OTA	KED2	.	01	E	.	.
1SA	K	OTA	KED2	.	01	D-	.	.	.	.

350	Logic for KIOA is on boards 217, 219.										
OSA	AK	OB4	1TA	KIOA	.	01	.	.	.	.
1SA	D	E	K	1TA	KIOA	.	01	.	.	.
1SA	D	E	OTA	KIOA	.	01	K-	.	.	.
1SA	D	K	OTA	KIOA	.	01	E-	.	.	.
1SA	E	K	OTA	KIOA	.	01	D-	.	.	.
1SA	AK	D	E	K	OTA	KIOA	.	01	AK	.
1SA	D	E	K	OB4	OTA	KIOA	.	01	OB4	.

351	Logic for KTP is on boards 218, 219.										
OSA	K	TP	1TP	KTP	.	01	.	.	.	.
1SA	1TA	KTP	.	01	.	.	.	.	.	.
1SA	K	OTA	KTP	.	01	K	.	.	.	.
1SA	TP	OTA	KTP	.	01	TP	.	.	.	.

Tape stops	Marker number	

352 — Logic for OCT is on boards 236, 237, 238, 233.

```
OSA   TX   AK   OB4   OB2   05    1TA   OCT    .    01   .
1SA   B2   D    E     K     OB3   1TA   OCT    .    01   .
1SA   B2   D    E     OB3   OTA   OCT    .    01   K-   .
1SA   B2   D    K     OB3   OTA   OCT    .    01   E-   .
1SA   B2   E    K     OB3   OTA   OCT    .    01   D-   .
1SA   AK   B2   D     E     K     OB3   OTA   OCT   .    01
AK    .    .    .     .     .     .     .     .     .    .
1SA   B2   D    E     K     OB4   OB3   OTA   OCT   .    01
OB4   .    .    .     .     .     .     .     .     .
1SA   B2   D    E     K     OTA   OCT    .    01   OB3-  .
1SA   B2   D    E     K     OB3   OB2   OTA   OCT   .    01
OB2   .    .    .     .     .     .     .
1SA   B2   D    E     K     OB3   05    OTA   OCT   .    01
05    .    .    .     .     .     .     .     .
1SA   TX   B2   D     E     K     OB3   OTA   OCT   .    01
TX    .    .    .     .     .     .     .
1SA   D    E    K     .     OB3   OTA   OCT    .    01   B2-   .
```

353 — Logic for OM is on boards 325, 336.

```
OSA   E    K    05    1TA   OM    .    01    .     .     .
1SA   06   04   03    1TA   OM    .    01    .     .     .
1SA   K    06   04    03    OTA   OM    .    01   K     .
1SA   E    06   04    03    OTA   OM    .    01   E     .
1SA   04   03   OTA   OM    .    01   06-   .     .     .
1SA   06   05   04    03    OTA   OM    .    01   05    .
1SA   06   03   OTA   OM    .    01   04-   .     .     .
1SA   06   04   OTA   OM    .    01   03-   .     .     .
```

354 — Logic for OX is on boards 207, 208, 219.

```
OSA   E    K    05    04    03    02    1TA   OX    .    01
1SA   TX   06   TP    1TA   OX    .    01    .     .     .
1SA   TX   K    06    TP    OTA   OX    .    01   K     .
1SA   TX   E    06    TP    OTA   OX    .    01   E     .
1SA   TX   TP   OTA   OX    .    01   06-   .     .     .
1SA   TX   06   05    TP    OTA   OX    .    01   05    .
1SA   TX   06   04    TP    OTA   OX    .    01   04    .
1SA   TX   06   03    TP    OTA   OX    .    01   03    .
1SA   TX   06   02    TP    OTA   OX    .    01   02    .
1SA   06   TP   OTA   OX    .    01   TX-   .     .     .
1SA   TX   06   OTA   OX    .    01   TP-   .     .     .
```

```
355     Logic for SA is on boards 325, 332.
        OSA       S        1TA      SA            .  01  .        .        .        .        .
        1SA       1TA      SA       .      01   .        01 .        .        .        .        .
        1SA       S        OTA      SA            .  01  S        .        .        .        .

356     Logic for TOX- is on boards 321, 324.
        OSA       1TA      TOX-            01  .            .        01 .        .        .        .
        1SA       TO       TX       1TA    TOX-         .        01 .        .        .        .
        1SA       TO       OTA      TOX-         .  01  TX-      .        .        .        .
        1SA       TX       OTA      TOX-         .  01  TO-      .        .        .        .

357     Logic for TXA- is on boards 318, 324.
        OSA       1TA      TXA-           01  .            .        .        .        .        .
        1SA       TX       1TA      TXA-         .  01  .        .        .        .        .
        1SA       OTA      TXA-     .      01   TX-      .        .        .        .        .

358     Logic for C430 is on boards 325, 327.
        OSA       1TA      C430     .      01   .            .        01 .        .        .
        1SA       C4       C3       PS     1TA    C430             .        01 .        .        .
        1SA       C3       PS       OTA    C430         .  01  C4-      .        .        .
        1SA       C4       OS       OTA    C430         .  01  C3-      .        .        .
        1SA       C4       C3       OTA    C430         .  01  *WI      PS-      .        .

359     Logic for C431 is on boards 325, 328.
        OSA       C3       1TA      C431         .  01  .        01 .        .        .        .
        1SA       C4       PS       1TA    C431             .        01 .        .        .
        1SA       PS       OTA      C431         .  01  C4-      .        01 .        .
        1SA       C4       C3       PS     OTA    C431             .        01 C3       .
        1SA       C4       OTA      C431     1    01  *WI      .        .        .        .
        OSA       C4       1TA      C432         .  01  .        01 .        .        .
        1SA       C3       PS       1TA    C432             .        01 .        .        .
        1SA       C4       C3       PS     OTA    C432             .        01 C4       .
        1SA       PS       OTA      C432         .  01  C3-      .        .        .        .
        1SA       C3       OTA      C432         .  01  *WI      .        .        .        .

360     Logic for C433 is on boards 325, 327.
        OSA       C4       C3       1TA    C433             .        01 .        .        .
        1SA       PS       1TA      C433         .  01  .        .        .        .        .
        1SA       C4       PS       OTA    C433             .        01 C4       .        .
        1SA       C3       PS       OTA    C433             .        01 C3       .        .
        1SA       OTA      C433     .      01   *WI      .        .        .        .

361     Logic for C5A is on boards 325, 326.
        OSA       C5       1TA      C5A          .  01  .        .        .        .        .
        1SA       1TA      C5A      .      01   .            .        .        .        .        .
        1SA       C5       OTA      C5A          .  01  C5       .        .        .        .
```

Tape stops	Marker number																	

362 — Logic for C760 is on boards 325, 329.

```
OSA     1TA     C760            .       01      .       .       .       .       .       .       .
1SA     C7      C6      1TA     C760            .       01      .       .       .       .       .
1SA     C6      OTA     C760            .       01  C7- .       .       .       .       .       .
1SA     C7      OTA     C760            .       01  C6- .       .       .       .       .       .
OSA     C6      1TA     C761            .       01      .       .       .       .       .       .
1SA     C7      1TA     C761            .       01      .       .       .       .       .       .
1SA     OTA     C761            .       01  C7-         .       .       .       .       .       .
1SA     C7      C6      OTA     C761            .       01  C6          .       .       .       .
```

363 — Logic for CFSU is on boards 321, 324.

```
OSA     C7      1TA     CFSU            .       01      .       .       .       .       .       .
1SA     CFSW    C6      1TA     CFSU            .       01      .       .       .       .       .
1SA     C6      OTA     CFSU            .       01  CFSW-       .       .       .       .       .
1SA     CFSW    C7      C6      OTA     CFSU            .       01  C7          .       .       .
1SA     CFSW    OTA     CFSU            .       01  C6-         .       .       .       .       .
```

364 — Logic for DA- is on boards 325, 330.

```
OSA     1TA     DA-             .       01      .       .       .       .       .       .       .
1SA     D       1TA     DA-             .       01      .       .       .       .       .       .
1SA     OTA     DA-             .       01  D-          .       .       .       .       .       .
```

365 — Logic for IPA is on boards 315, 401.

```
OSA     IP      1TA     IPA             .       01      .       .       .       .       .       .
1SA     1TA     IPA             .       01      .       .       .       .       .       .       .
1SA     IP      OTA     IPA             .       01  IP          .       .       .       .       .
```

366 — Logic for IPA- is on boards 315, 402.

```
OSA     1TA     IPA-            .       01      .       .       .       .       .       .       .
1SA     IP      1TA     IPA-            .       01      .       .       .       .       .       .
1SA     OTA     IPA-            .       01  IP-         .       .       .       .       .       .
```

367 — Logic for IXA is on boards 316, 403.

```
OSA     IX      1TA     IXA             .       01      .       .       .       .       .       .
1SA     1TA     IXA             .       01      .       .       .       .       .       .       .
1SA     IX      OTA     IXA             .       01  IX          .       .       .       .       .
```

368 — Logic for KA- is on boards 234, 236. Logic for KOPC is on boards 234, 236.

```
OSA     1TA     KA-             .       01      .       .       .       .       .       .       .
1SA     K       1TA     KA-             .       01      .       .       .       .       .       .
1SA     OTA     KA-             .       01  K-          .       .       .       .       .       .
OSA     AK      1TA     KOPC            .       01      .       .       .       .       .       .
1SA     D       E       K       PS      1TA     KOPC            .       01      .       .       .
1SA     D       E       PS      OTA     KOPC            .       01  K-          .       .       .
```

```
         1SA      D        K        PS       OTA      KOPC     .    01  E-       .        .
         1SA      E        K        PS       OTA      KOPC     .    01  D-       .        .
         1SA      AK       D        E        K        PS       OTA      KOPC   .   01  AK
         1SA      D        E        K        OTA      KOPC     .    01  *WI      .        .

369   Logic for MNA is on boards 219, 223.  Logic for MNA- is on boards 219, 223.
         OSA      MN       1TA      MNA      .    01   .        .        .        .        .
         1SA      1TA      MNA      .    01   .        .        .        .        .        .
         1SA      MN       OTA      MNA      .    01  MN        .        .        .        .
         OSA      1TA      MNA-     .    01   .        .        .        .        .        .
         1SA      MN       1TA      MNA-     .    01   .        .        .        .        .
         1SA      OTA      MNA-     .    01  MN-       .        .        .        .        .

370   Logic for 04A- is on boards 236, 238.
         OSA      1TA      04A-     .    01   .        .        .        .        .        .
         1SA      04       1TA      04A-     .    01   .        .        .        .        .
         1SA      OTA      04A-     .    01  04-       .        .        .        .        .

371   Logic for 02A is on boards 236, 237.
         OSA      02       1TA      02A      .    01   .        .        .        .        .
         1SA      1TA      02A      .    01   .        .        .        .        .        .
         1SA      02       OTA      02A      .    01  02        .        .        .        .

372   Logic for TOA is on boards 217, 219.
         OSA      TO       1TA      TOA      .    01   .        .        .        .        .
         1SA      1TA      TOA      .    01   .        .        .        .        .        .
         1SA      TO       OTA      TOA      .    01  TO        .        .        .        .

373   Logic for TOA- is on boards 317, 324.
         OSA      1TA      TOA-     .    01   .        .        .        .        .        .
         1SA      TO       1TA      TOA-     .    01   .        .        .        .        .
         1SA      OTA      TOA-     .    01  TO-       .        .        .        .        .

374   Logic for TOB is on boards 216, 219.
         OSA      TO       1TA      TOB      .    01   .        .        .        .        .
         1SA      1TA      TOB      .    01   .        .        .        .        .        .
         1SA      TO       OTA      TOB      .    01  TO        .        .        .        .

375   Logic for TPA is on boards 236, 440.
         OSA      TP       1TA      TPA      .    01   .        .        .        .        .
         1SA      1TA      TPA      .    01   .        .        .        .        .        .
         1SA      TP       OTA      TPA      .    01  TP        .        .        .        .

376   Logic for TXC is on boards 318, 324.
         OSA      TX       1TA      TXC      .    01   .        .        .        .        .
         1SA      1TA      TXC      .    01   .        .        .        .        .        .
         1SA      TX       OTA      TXC      .    01  TX        .        .        .        .
```

Tape stops	Marker number											

```
377    Logic for OMD is on boards 219, 222.
       OSA     E       K       05      1TA     OMD             .   01  .       .       .       .
       1SA     06      03      1TA     OMD             01  .   .   01  .       .       .       .
       1SA     K       06      03      OTA     OMD             .   01  K       .       .       .
       1SA     E       06      03      OTA     OMD             .   01  E       .       .       .
       1SA     03      OTA     OMD     .       01      06-     .       .       .       .       .
       1SA     06      05      03      OTA     OMD             .   01  05      .       .       .
       1SA     06      OTA     OMD     .       01      03-     .       .       .       .       .

378    Logic for TLS is on boards 235, 236.
       OSA     B6      B4      1TA     TLS             .   01  .       .       .       .
       1SA     B5      1TA     TLS     .       01      .   .       .       .       .       .
       1SA     B6      B5      OTA     TLS             .   01  B6      .       .       .
       1SA     OTA     TLS     .       01      B5-     .       .       .       .       .       .
       1SA     B5      B4      OTA     TLS             .   01  B4      .       .       .

379    Logic for TRC is on boards 233, 236.
       OSA     B5      1TA     TRC     .       01      .       .       .       .       .
       1SA     B6      1TA     TRC     .       01      .       .       .       .       .
       1SA     OTA     TRC     .       01      B6-     .       .       .       .       .
       1SA     B6      B5      OTA     TRC             .   01  B5      .       .       .

380    Logic for TRS is on boards 234, 236.
       OSA     B4      1TA     TRS     .       01      .       .       .       .       .
       1SA     B6      B5      1TA     TRS             .   01  .       .       .       .
       1SA     B5      OTA     TRS     .       01      B6-     .       .       .       .
       1SA     B6      OTA     TRS     .       01      B5-     .       .       .       .
       1SA     B6      B5      B4      OTA     TRS             .   01  B4      .       .

381    Logic for T32 is on boards 219, 224.
       OSA     B6      TS0     1TA     T32             .   01  .       .       .       .
       1SA     1TA     T32     .       01      .       .       .       .       .       .
       1SA     B6      OTA     T32     .       01      B6      .       .       .       .
       1SA     TS0     OTA     T32     .       01      TS0     .       .       .       .

382    Logic for TSH is on boards 233, 236.
       OSA     AK      OB2     1TA     TSH             .   01  .       .       .       .
       1SA     T0      TX      DSP     D       E       K       OB3     TP      1TA
       TSH     .       01      .       .       .       .       .       .       .       .
       1SA     T0      TX      DSP     D       E       OB3     TP      OTA     TSH
       .       01      K-      .       .       .       .       .       .       .       .
       1SA     T0      TX      DSP     D       K       OB3     TP      OTA     TSH
       .       01      E-      .       .       .       .       .       .       .       .
```

```
1SA      TO      TX      DSP     E       K       OB3     TP      OTA     TSH
 .   01  D-      .       .       .       .       .       .       .       .
1SA      TO      TX      AK      DSP     D       E       K       OB3     TP
OTA      TSH     .   01  AK      .       .       .       .       .       .
```

383   Logic for TSH is on boards 233, 236.
```
1SA      TO      TX      D       E       K       OB3     TP      OTA     TSH
 .   01  DSP-    .       .       .       .       .       .       .       .
1SA      TO      TX      DSP     D       E       K       TP      TOA     TSH
 .   01  OB3-    .       .       .       .       .       .       .       .
1SA      TO      TX      DSP     D       E       K       OB3     OB2     TP
OTA      TSH     .   01  OB2     .       .       .       .       .       .
1SA      TO      TX      DSP     D       E       K       OB3     OTA     TSH
 .   01  TP-     .       .       .       .       .       .       .       .
1SA      TO      DSP     D       E       K       OB3     TP      OTA     TSH
 .   01  TX-     .       .       .       .       .       .       .       .
1SA      TX      DSP     D       E       K       OB3     TP      OTA     TSH
 .   01  TO-     .       .       .       .       .       .       .       .
```

NOTE

Some of the primary and gates in FADAC are connected for test by the AP line of FALT.
This tape tests those addressable primaries.

384   Logic for BDX is on boards 237, 317, 404.
```
OSA      DSP     X2      X1      1TA     BDX     .   01  .       .       .
1SA      DSH     XD      PS      1TA     BDX     .   01  .       .       .
1SA      DSH     XD      X1      PS      OTA     BDX     .   01  X1      .
1SA      DSH     XD      X2      PS      OTA     BDX     .   01  X2      .
1SA      DSH     DSP     XD      PS      OTA     BDX     .   01  NXD     DSP
1SA      XD      PS      OTA     BDX     .   01  NXD     DSH-    .       .
1SA      DSH     XD      OTA     BDX     .   01  NXD     *WI     .       .
1SA      DSH     PS      OTA     BDX     .   01  NXD     XD-     .       .
```

385   Logic for BL1 is on board 231. Logic for BL2 is on board 231.
```
OSA      B1      1TA     BL1     .   01  .       .       .       .       .
1SA      B3      B2      1TA     BL1     .   01  .       .       .       .
1SA      B2      OTA     BL1     .   01  B3-     .       .       .       .
1SA      B3      OTA     BL1     .   01  B2-     .       .       .       .
1SA      B3      B2      B1      OTA     BL1     .   01  B1      .       .
OSA      B2      1TA     BL2     .   01  .       .       .       .       .
1SA      B3      B1      1TA     BL2     .   01  .       .       .       .
1SA      B1      OTA     BL2     .   01  B3-     .       .       .       .
1SA      B3      B2      B1      OTA     BL2     .   01  B2      .       .
1SA      B3      OTA     BL2     .   01  B1-     .       .       .       .
```

Tape stops	Marker number											

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Tape    Marker
stops   number

        386     Logic for BL3 is on board 230.
                OSA     B2      B1      1TA     BL3     .   01  .       .   .   .   .
                1SA     B3      1TA     BL3     .   01  .   .       .   .   .   .
                1SA     OTA     BL3     .   01  B3-     .   01  .       .   .   .   .
                1SA     B3      B2      OTA     BL3     .   01  B2      .   .   .   .
                1SA     B3      B1      OTA     BL3     .   01  B1      .   .   .   .

        387     Logic for BL5 is on board 207.
                OSA     B3      B1      1TA     BL5     .   01  .       .   .   .   .
                1SA     B2      1TA     BL5     .   01  .   .       .   .   .   .
                1SA     B3      B2      OTA     BL5     .   01  B3      .   .   .   .
                1SA     OTA     BL5     .   01  B2-     .       .   .   .   .
                1SA     B2      B1      OTA     BL5     .   01  B1      .   .   .   .

        388     Logic for BL6 is on board 230.
                OSA     B3      B2      1TA     BL6     .   01  .       .   .   .   .
                1SA     B1      1TA     BL6     .   01  .   .       .   .   .   .
                1SA     B3      B1      OTA     BL6     .   01  B3      .   .   .   .
                1SA     B2      B1      OTA     BL6     .   01  B2      .   .   .   .
                1SA     OTA     BL6     .   01  B1-     .       .   .   .   .

        389     Logic for B5L4 is on boards 226, 325, 326.
                OSA     B5      B3      1TA     B5L4    .   01  .       .   .   .   .
                1SA     B2      B1      1TA     B5L4    .   01  .       01  .   .   .
                1SA     B5      B2      B1      OTA     B5L4    .   01  B5      .   .   .
                1SA     B3      B2      B1      OTA     B5L4    .   01  BL4     B3      .   .
                1SA     B1      OTA     B5L4    .   01  BL4     B2-     .       .   .
                1SA     B2      OTA     B5L4    .   01  BL4     B1-     .       .   .

        390     Logic for CNU6 is on boards 325, 328, 331.
                OSA     C7      C6      1TA     CNU6    .   01  .       .   .   .   .
                1SA     C5      1TA     CNU6    .   01  .   .       .   .   .   .
                1SA     C7      C5      OTA     CNU6    .   01  C7      .   .   .   .
                1SA     C6      C5      OTA     CNU6    .   01  C6      .   .   .   .
                1SA     OTA     CNU6    .   01  C5A-    C5-     .       .   .   .   .

        391     Logic for CR75 is on board 231.
                OSA     CR7     CR6     K       1TA     CR75    .   01  .       .   .   .
                1SA     CR5     1TA     CR75    .   01  .   .       .   .   .   .
                1SA     CR7     CR5     OTA     CR75    .   01  CR7     .   .   .   .
                1SA     CR6     CR5     OTA     CR75    .   01  CR6     .   .   .   .
                1SA     OTA     CR75    .   01  CR5-    .       .   .   .   .
                1SA     CR5     K       OTA     CR75    .   01  K       .   .   .   .
```

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Tape    Marker
stops   number

        397     Logic for EAKO is on boards 229, 235, 236.
                OSA     1TA     EAKO    .       01      .               .               .       .       .       .
                1SA     AK      E       PE      1TA     EAKO            .       01      .       .       .       .
                1SA     AK      PE      OTA     EAKO    .       01      E-              .       .       .       .
                1SA     E       PE      OTA     EAKO    .       01      AKA-    AK-     .       .       .       .
                1SA     AK      E       OTA     EAKO    .       01      PE-             .       .       .       .

        398     Logic for ERR- is on board 231.
                OSA     1TA     ERR-    .       01      .               .               .       .       .       .
                1SA     OFLO    PE      1TA     ERR-    .       01      .               .       .       .       .
                1SA     PE      OTA     ERR-    .       01      OFLO-                   .       .       .       .
                1SA     OFLO    OTA     ERR-    .       01      PE-                     .       .       .       .

        399     Logic for FST is on boards 440, 441.
                OSA     B6      B5      B3      B2      CL5     IP      1TA     FST     .       01
                1SA     B1      CL7     CL6     1TA     FST     .       01      .               .       .
                1SA     B1      CL7     CL6     IP      OTA     FST             .       01      IP      .
                1SA     B1      CL6     OTA     FST     .       01      CL7-            .               .       .
                1SA     B1      CL7     OTA     FST     .       01      CL6-            .               .       .
                1SA     B1      CL7     CL6     CL5     OTA     FST     .       01      CL5     .
                1SA     B6      B1      CL7     CL6     OTA     FST     .       01      B6      .
                1SA     B5      B1      CL7     CL6     OTA     FST     .       01      B5      .
                1SA     B3      B1      CL7     CL6     OTA     FST     .       01      B3      .
                1SA     B2      B1      CL7     CL6     OTA     FST     .       01      B2      .
                1SA     CL7     CL6     OTA     FST     .       01      B1-             .               .       .

        400     Logic for ICP is on boards 325, 331, 335.
                OSA     IC      K       TP      1TA     ICP     .       01      .               .       .       .
                1SA     D       1TA     ICP     .       01      .               .               .       .       .
                1SA     D       K       OTA     ICP     .       01      KDIC    K               .       .       .
                1SA     OTA     ICP     .       01      KDIC    D-              .               .       .       .
                1SA     D       IC      OTA     ICP     .       01      KDIC    IC              .       .       .
                1SA     D       TP      OTA     ICP     .       01      TP              .               .       .

        401     Logic for KAK1 is on boards 321, 324, 336.
                OSA     AK      1TA     KAK1    .       01                      .               .       .       .
                1SA     K       1TA     KAK1    .       01      .               .               .       .       .
                1SA     OTA     KAK1    .       01      KC-     K-              .               .       .       .
                1SA     AK      K       OTA     KAK1    .       01      AK              .               .       .

        402     Logic for KD3M is on boards 213, 320, 324.
                OSA     D       K       1TA     KD3M    .       01      .               .               .       .
                1SA     NC      1TA     KD3M    .       01      .               .               .       .       .
                1SA     K       NC      OTA     KD3M    .       01      KD3     K               .       .       .
                1SA     D       NC      OTA     KD3M    .       01      KD3     D               .       .       .
                1SA     OTA     KD3M    .       01      NC-     .               .               .       .       .
```

```
403     Logic for KIOC is on boards 217, 219, 239.
        OSA     AK      CL7     1TA     KIOC        .   01  .           .       .       .
        1SA     D       K       1TA     KIOC        .   01  .           .       .       .
        1SA     D       OTA     KIOC        .   01  KIO     K-          .       .       .
        1SA     K       OTA     KIOC        .   01  KIO     D-          .       .       .
        1SA     AK      D       K       OTA     KIOC        .   01  KIO     AK      .
        1SA     CL7     D       K       OTA     KIOC        .   01  CL7     .

404     Logic for KIOP is on boards 209, 217, 219.
        OSA     AK      IP      1TA     KIOP        .   01  .           .       .       .
        1SA     D       K       1TA     KIOP        .   01  .           .       .       .
        1SA     AK      OTA     KIOP        .   01  KIO         .       .       .
        1SA     D       IP      K       OTA     KIOP        .   01  IP      .       .

405     Logic for KIOX is on boards 216, 218, 219, 232, 236, 324, 325, 333.
        OSA     TX      E       K       06      03          1TA     KIOX        .   01  .
        1SA     05      1TA     KIOX        .   01  .           .       .       .
        1SA     K       05      OTA     KIOX        .   01  KO6     K       .       .
        1SA     E       05      OTA     KIOX        .   01  KO6     E       .       .
        1SA     06      05      OTA     KIOX        .   01  KO6     06      .       .
        1SA     OTA     KIOX        .   01  05A-        05-         .       .       .
        1SA     05      03      OTA     KIOX        .   01  03A     03      .       .
        1SA     TX      05      OTA     KIOX        .   01  TXB     TX      .       .

406     Logic for KSU0 is on board 336.
        OSA     E       1TA     KSU0        .   01  .           .       .       .       .
        1SA     AK      D       K       1TA     KSU0        01  .           .       .
        1SA     AK      E       OTA     KSU0        .   01  KED2        .       .       .
        1SA     D       K       OTA     KSU0        .   01  AKA-        .       .       .

407     Logic for KSU1 is on board 229.
        OSA     AK      E       1TA     KSU1        .   01  .           .       .       .
        1SA     D       K       1TA     KSU1        .   01  .           .       .       .
        1SA     E       OTA     KSU1        .   01  KED2        .           .       .       .
        1SA     AK      D       K       OTA     KSU1        .   01  AK      .       .

408     Logic for KFST is on boards 320, 324, 337.
        OSA     B4      K       TS0     1TA     KFST        .   01  .           .       .
        1SA     FS      1TA     KFST        .   01  .           .       .       .
        1SA     FS      K       OTA     KFST        .   01  KT32        K       .       .
        1SA     B4      FS      OTA     KFST        .   01  KT32        B4      .       .
        1SA     FS      TS0     OTA     KFST        .   01  KT32        TS0     .       .
        1SA     OTA     KFST        .   01  FS-         .           .       .       .

409     Logic for MAX0 is on board 341.
        OSA     1TA     MAX0        .   01  .           .       .       .       .
        1SA     AX      MN      1TA     MAX0        .   01  .           .       .       .
        1SA     AX      OTA     MAX0        .   01  MN-         .       .       .       .
        1SA     MN      OTA     MAX0        .   01  AX-         .       .       .       .
```

Tape stops	Marker number

```
  410   Logic for MAX1 is on board 340.  Logic for MAX2 is on board 340.  Logic for MAX3 is on
        board 340.
        0SA     AX      1TA     MAX1      .   01  .       .       .       .       .
        1SA     MN      1TA     MAX1         . 01  .       .       .       .       .
        1SA     OTA     MAX1    .   01  MN-      .       .       .       .       .
        1SA     AX      MN      OTA     MAX1      .   01  AX      .       .       .
        0SA     MN      1TA     MAX2      .   01  .       .       .       .       .
        1SA     AX      1TA     MAX2      .   01  .       .       .       .       .
        1SA     AX      MN      OTA     MAX2      .   01  MN      .       .       .
        1SA     OTA     MAX2    .   01  AX-      .       .       .       .       .
        0SA     AX      MN      1TA     MAX3      .   01  .       .       .       .
        1SA     1TA     MAX3    .   01  .       .       .       .       .       .
        1SA     MN      OTA     MAX3      .   01  MN      .       .       .       .
        1SA     AX      OTA     MAX3      .   01  AX      .       .       .       .

  411   Logic for OBW is on board 332.
        0SA     K       OB6     1TA     OBW       .   01  .       .       .       .
        1SA     OB5     OB3     1TA     OBW       .   01  .       .       .       .
        1SA     K       OB5     OB3     OTA     OBW       .   01  K       .       .
        1SA     OB6     OB5     OB3     OTA     OBW       .   01  OB6     .       .
        1SA     OB3     OTA     OBW       .   01  OB5-      .       .       .       .
        1SA     OB5     OTA     OBW       .   01  OB3-      .       .       .       .

  412   Logic for ODO is on boards 228, 319, 324.
        0SA     D       E       K       05      04      1TA     ODO       .   01  .
        1SA     06      03      1TA     ODO       .   01  .       .       .       .
        1SA     K       06      03      OTA     ODO       .   01  OD      K       .
        1SA     E       06      03      OTA     ODO       .   01  OD      E       .
        1SA     03      OTA     ODO       .   01  OD      06-       .       .       .
        1SA     06      05      03      OTA     ODO       .   01  OD      05      .
        1SA     06      04      03      OTA     ODO       .   01  OD      04      .
        1SA     06      OTA     ODO       .   01  OD      03-       .       .       .
        1SA     D       06      03      OTA     ODO       .   01  KD3     .       .

  413   Logic for OLP is on boards 217, 219, 236, 237, 314, 318, 324, 334, 405.
        0SA     F       K       05      04      03      1TA     OLP       .   01  .
        1SA     06      02      TP      1TA     OLP       .   01  .       .       .
        1SA     K       06      02      TP      OTA     OLP       .   01  K06-    K
        1SA     E       06      02      TP      OTA     OLP       .   01  K06-    E
        1SA     02      TP      OTA     OLP       .   01  K06-    06-       .       .
        1SA     06      05      02      TP      OTA     OLP       .   01  05A     05
        1SA     06      04      02      TP      OTA     OLP       .   01  04B     04
        1SA     06      03      02      TP      OTA     OLP       .   01  03A       .
        1SA     06      TP      OTA     OLP       .   01  02-       .       .       .
        1SA     06      02      OTA     OLP       .   01  TPA-    TP-       .       .
```

414   Logic for OL4 is on boards 211, 214, 216.

```
      OSA    04      1TA     OL4      .    01   .          .          .          .
      1SA    03      02      1TA      OL4       .    01   .    .          .          .
      1SA    04      03      02       OTA       OL4       .    01   04B       .          .
      1SA    02      OTA     OL4      .    01   032-      03-        .          .          .
      1SA    03      OTA     OL4      .    01   032-      02-        .          .          .
```

415   Logic for OMDL is on board 339.

```
      OSA    E       K       05       1TA       OMDL      .    01   .          .          .
      1SA    D       06      03       1TA       OMDL      .    01   .          .          .
      1SA    D       E       K        05        OTA       OMDL      .    01   OMD        .
      1SA    06      03      OTA      OMDL      .    01   D-         .          .          .
```

416   Logic for OMDM is on boards 219, 222, 229.

```
      OSA    D       E       K        05        1TA       OMDM      .    01   .          .
      1SA    NC      06      03       1TA       OMDM      .    01   .          .          .
      1SA    K       NC      05       OTA       OMDM      .    01   OMD        .          .
      1SA    E       NC      06       03        OTA       OMDM      .    01   ED3    E
      1SA    D       NC      06       03        OTA       OMDM      .    01   ED3    D
      1SA    06      03      OTA      OMDM      .    01   NC-        .          .          .
```

417   Logic for OMF is on boards 232, 236, 239.

```
      OSA    E       K       05       1TA       OMF       .    01   .          .          .
      1SA    06      04      1TA      OMF       .    01   .          .          .          .
      1SA    E       K       04       OTA       OMF       .    01   K06-       .          .
      1SA    06      05      04       OTA       OMF       .    01   05A        .          .
      1SA    06      OTA     OMF      .    01   04B-      04-        .          .          .
```

418   Logic for OMNF is on boards 325, 336, 337.

```
      OSA    E       K       05       1TA       OMNF      .    01   .          .          .
      1SA    NC      06      04       03        1TA       OMNF      .    01   .          .
      1SA    E       K       NC       05        OTA       OMNF      .    01   OM         .
      1SA    06      04      03       OTA       OMNF      .    01   NC         .          .
```

419   Logic for OOP is on board 212.

```
      OSA    PP      1TA     OOP      .    01   .          .          .          .          .
      1SA    OB4     05      1TA      OOP       .    01   .          .          .          .
      1SA    05      OTA     OOP      .    01   OB4-      .          .          .          .
      1SA    OB4     OTA     OOP      .    01   05A-      .          .          .          .
      1SA    OB4     05      PP       OTA       OOP       .    01   PP         .          .
```

```
Tape    Marker
stops   number

        420    Logic for OTL is on boards 227, 234, 236.
               OSA     D      E      K       06     05   05      03     1TA    OTL   .   01
               1SA     04     1TA    OTL     .      01   .       .      .      .     .
               1SA     K      04     OTA     OTL    01   K065    K      .      .     .
               1SA     E      04     OTA     OTL    01   K065    E      .      .     .
               1SA     06     04     OTA     OTL    01   K065    06     .      .     .
               1SA     05     04     OTA     OTL    01   K065    05     .      .     .
               1SA     OTA    OTL    .       01     04B- .       .      .      .     .
               1SA     04     03     OTA     OTL    .    01      03A    .      .     .
               1SA     D      04     OTA     OTL    .    01      KD3    .      .     .

        421    Logic for OYC5 is on boards 238, 325, 326.
               OSA     C5     E      K       06     05   04      03     02     1TA
               OYC5    .      01     .       .      .    .       .      .      .     ..
               1SA     1TA    OYC5   .       01     .    .       .      .      .
               1SA     K      OTA    OYC5    .      01   OY      K      .      .     .
               1SA     E      OTA    OYC5    .      01   OY      E      .      .     .
               1SA     06     OTA    OYC5    .      01   OY      06     .      .     .
               1SA     05     OTA    OYC5    .      01   OY      05     .      .     .
               1SA     04     OTA    OYC5    .      01   OY      04     .      .     .
               1SA     03     OTA    OYC5    .      01   OY      03     .      .     .
               1SA     02     OTA    OYC5    .      01   OY      02     .      .     .
               1SA     C5     OTA    OYC5    .      01   C5      .      .      .     .

        422    Logic for 04X is on boards 208, 319, 324.
               OSA     TX     1TA    04X     .      01   .       .      .      .     .
               1SA     04     1TA    04X     .      01   .       .      .      .     .
               1SA     OTA    04X    .       01     04B- .       .      .      .     .
               1SA     TX     04     OTA     04X    .    01      TXA    TX     .     .

        423    Logic for T15 is on boards 210, 235, 236.
               OSA     B6     1TA    T15     .      01   .       .      .      01    .
               1SA     B4     B3     B2      B1     1TA  T15     .      01     .
               1SA     B6     B3     B2      B1     OTA  T15     .      01     TOP
               1SA     B4     B2     B1      OTA    T15  .       01     BLO    B3-
               1SA     B4     B3     B1      OTA    T15  .       01     BLO    B2-
               1SA     B4     B3     B2      OTA    T15  .       01     BLO    B1-

        424    Logic for T19 is on board 209.
               OSA     B6     B3     1TA     T19    .    01      .      .      .     .
               1SA     B4     B2     B1      1TA    T19  .       01     .      .     .
               1SA     B6     B2     B1      OTA    T19  .       01     TOP    .     .
               1SA     B4     B3     OTA     T19    .    01      BL4    .      .     .
```

425 Logic for VER is on boards 219, 224, 233, 236, 340.

OSA	AK	04	1TA	VER	.	01	.	.	.	.
1SA	TO	TX	D	K	MC	ND	TP	1TA	VER	.
.	01	.	.	.	.	.	.	.	.	
1SA	TO	TX	D	K	ND	TP	OTA	VER	.	01
MC-	.	.	.	.	.	.	.	.		
1SA	TO	TX	D	K	MC	TP	OTA	VER	.	01
ND-	.	.	.	.	.	.	.	.		
1SA	TO	TX	AK	MC	ND	TP	OTA	VER	.	01
KIO	.	.	.	.	.	.	.	.		
1SA	TO	TX	D	K	MC	ND	OTA	VER	.	01
TPO-	TP-	.	.	.	.	.	.	.		
1SA	TO	D	K	MC	ND	TP	OTA	VER	.	01
TPO-	TX-	.	.	.	.	.	.	.		
1SA	TX	D	K	MC	ND	TP	OTA	VER	.	01
TPO-	TO-	.	.	.	.	.	.	.		
1SA	TO	TX	D	K	MC	ND	04	TP	OTA	
VER	.	01	04A	04	.	.	.	.	.	.

426 Logic for XCT is on boards 324, 325, 327, 332, 338.

OSA	TX	DSP	1TA	XCT	.	01	.	.	.	.
1SA	B2	S	1TA	XCT	.	01	.	.	.	.
1SA	B2	DSP	S	OTA	XCT	.	01	DSP	.	.
1SA	B2	OTA	XCT	.	01	SA-	S-	.	.	.
1SA	TX	B2	S	OTA	XCT	.	01	TXF	TX	.
1SA	S	OTA	XCT	.	01	TXF	B2-	.	.	.

427 Logic for CPS4 is on boards 314, 315.

OSA	CP7	CPFS	E6	1TA	CPS4	.	01	.	.	.	
1SA	CP6	CP5	E7	E8	1TA	CPS4	.	01	.	.	
1SA	CP6	CP5	CPFS	E7	E8	OTA	CPS4	.	01	CPFS	
1SA	CP7	CP6	CP5	E7	E8	OTA	CPS4	.	01	CP7	
1SA	CP5	E7	E8	OTA	CPS4	.	01	CP6-	.	.	
1SA	CP6	E7	E8	OTA	CPS4	.	01	CP5-	.	.	
1SA	CP6	CP5	E6	OTA	CPS4	.	01	E6	.	.	
OSA	CP7	CP5	CPFS	E4	E8	1TA	CPS5	.	01	.	
1SA	CP6	E6	E7	1TA	CPS5	.	01	.	.	.	
1SA	CP6	CPFS	E6	E7	OTA	CPS5	.	01	CPFS	.	
1SA	CP7	CP6	E6	E7	OTA	CPS5	.	01	CP7	.	
1SA	E6	E7	OTA	CPS5	.	01	CP6-	.	.	.	
1SA	CP6	CP5	E6	E7	OTA	CPS5	.	01	CP5	.	
1SA	CP6	E6	E7	E8	OTA	CPS5	.	01	E8	.	

428 Logic for CL34 is on board 215.

OSA	CL3	04	1TA	CL34	.	01	.	.	.	.
1SA	1TA	CL34	.	01	.	.	.	.	.	
1SA	CL3	OTA	CL34	.	01	CL3	.	.	.	.
1SA	04	OTA	CL34	.	01	04	.	.	.	.

Tape stops	Marker number											

```
              429    Logic for BL7 is on board 440.
                     OSA    B3     B2     B1       1TA    BL7       .    01   .        .        .        .
                     1SA    1TA    BL7     .     01    .           .         .        .        .        .
                     1SA    B3     OTA    BL7      .    01   B3     .         .        .        .        .
                     1SA    B2     OTA    BL7      .    01   B2     .         .        .        .        .
                     1SA    B1     OTA    BL7      .    01   B1     .         .        .        .        .

              430    Logic for KB5 is on boards 318, 325, 330.
                     OSA    B5     K      1TA    KB5       .    01   .        .        .        .        .
                     1SA    1TA    KB5     .     01    .           .         .        .        .        .
                     1SA    K      OTA    KB5      .    01   KB       K       .        .        .        .
                     1SA    B5     OTA    KB5      .    01   B5     .         .        .        .        .

              431    Logic for KED3 is on board 212.
                     OSA    D      E      1TA    KED3      .    01   .        .        .        .        .
                     1SA    K      1TA    KED3     .    01    .        .        .        .        .        .
                     1SA    OTA    KED3     .    01   KC-    .        .        .        .        .        .
                     1SA    D      E      K      OTA    KED3       .    01   ED3       .        .        .

              432    Logic for KE0 is on board 441.
                     OSA    1TA    KE0      .    01    .              .         .        .        .        .
                     1SA    E      K      1TA    KE0      .    01   .        .        .        .        .
                     1SA    E      OTA    KE0      .    01   KC-    .         .        .        .        .
                     1SA    K      OTA    KE0      .    01   E-     .         .        .        .        .

              433    Logic for KHRS is on boards 325, 330, 331, 341.
                     OSA    B4     D      1TA    KHRS      .    01   .        .        .        .        .
                     1SA    B6     B5     K      1TA    KHRS       .    01   K-       .        .        ,
                     1SA    B6     B5     OTA    KHRS     .    01   KTRS   K-       .        .        .
                     1SA    B5     K      OTA    KHRS     .    01   KTRS   B6-      .        .        .
                     1SA    B6     K      OTA    KHRS     .    01   KTRS   B5-      .        .        .
                     1SA    B6     B5     B4     K      OTA    KHRS       .    01   KTRS   B4
                     1SA    B6     B5     D      K      OTA    KHRS       .    01   D        .

              434    Logic for KLC- is on boards 240, 325, 331.
                     OSA    LC     1TA    KLC-     .    01    .        .        .        .        .        .
                     1SA    K      1TA    KLC-     .    01    .        .        .        .        .        .
                     1SA    OTA    KLC-     .    01   KB-    K-       .        .        .        .        .
                     1SA    K      LC     OTA    KLC-     .    01   LC     .         .        .        .
```

```
435     Logic for KW is on boards 325, 326, 333.
        OSA     AK      MC      1TA     KW              .       01  .           .           .
        1SA     D       K       ND      1TA     KW              .   01          .           .
        1SA     D       ND      OTA     KW              .       01  K-          .           .
        1SA     K       ND      OTA     KW              .       01  D-          .           .
        1SA     AK      D       K       ND      OTA     KW              .       01  AKA     AK
        1SA     D       K       MC      ND      OTA     KW              .       01  MC
        1SA     D       K       OTA     KW              .       01  ND-         .           .

436     Logic for MMPT is on boards 210, 319, 324.
        OSA     TP      1TA     MMPT            .       01  .           .           .       .
        1SA     MC      1TA     MMPT            .       01  .           .           .       .
        1SA     OTA     MMPT            .       01  MC-         .           .           .
        1SA     MC      TP      OTA     MMPT            .       01  TPB     TP          .       .

437     Logic for NDX- is on board 227.
        OSA     TX      1TA     NDX-            .       01  .           .           .       .
        1SA     B2      ND      1TA     NDX-            .       01  .           .       .
        1SA     B2      OTA     NDX-            .       01  ND-         .           .       .
        1SA     TX      ND      OTA     NDX-            .       01  TXF         .           .

438     Logic for OA is on boards 213, 324, 334.
        OSA     AC      E       K       1TA     OA              .       01  .           .       .
        1SA     DC      06      03      1TA     OA              .       01  .           .       .
        1SA     DC      E       K       03      OTA     OA              .       01  K06-        .
        1SA     DC      06      OTA     OA              .       01  03A-    03-         .
        1SA     AC      DC      06      03      OTA     OA              .       01  AC          .
        1SA     06      03      OTA     OA              .       01  DC-         .           .

439     Logic for OBN is on boards 215, 218, 219.
        OSA     OB5     OB4     OB3     OB2     1TA     OBN             .       01  .       .
        1SA     1TA     OBN             .       01  .       .           .           .       .
        1SA     OB5     OTA     OBN             .       01  OB5         .           .       .
        1SA     OB3     OTA     OBN             .       01  OB3         .           .       .
        1SA     OB4     OTA     OBN             .       01  OB42    OB4         .       .
        1SA     OB2     OTA     OBN             .       01  OB42    OB2         .       .

440     Logic for OCL is on boards 213, 217, 219.
        OSA     AK      OB4     04      1TA     OCL             .       01  .           .           01  .
        1SA     D       E       K       OB3     OB2     1TA     OCL         .           01  .
        1SA     AK      OB4     OB3     OB2     OTA     OCL         .       01  KIOA        .
        1SA     D       E       K       OB3     OB2     04      OTA     OCL         .       01
        04B             .       .       .       .       .           .           .       .
        1SA     D       E       K       OB2     OTA     OCL         .       01  OB3-        .
        1SA     D       E       K       OB3     OTA     OCL         .       01  OB2-        .
```

Tape stops	Marker number											

441   Logic for OEL is on board 216.

```
OSA    E      K      06     05        02     1TA    OEL      .   01  .
1SA    03     1TA    OEL      .   01   .             .           .
1SA    E      K      06     05        03     OTA    OEL      .   01  K065
1SA    OTA    OEL      .   01  03A-       .           .       .       .
1SA    03     02     OTA    OEL      .   01  02        .       .       .
```

442   Logic for OF is on boards 226, 324, 334.

```
OSA    E      K      05     03     1TA    OF       .   01  .           .
1SA    06     04     TP     1TA    OF       .   01  .   01  K06-        .
1SA    E      K      04     TP     OTA    OF       .   01  05A         .
1SA    06     05     04     TP     OTA    OF       .   01  05A         .
1SA    06     TP     OTA    OF       .   01  04B-       .   01  03A
1SA    06     04     03     TP     OTA    OF       .   01  03A
1SA    06     04     OTA    OF       .   01  TPA-       .           .
```

443   Logic for OGO is on boards 214, 219, 222.

```
OSA    AK     OB3    OB2    1TA    OGO      .   01  .           .   01  .
1SA    D      E      K      OB4    PP     1TA    OGO      .   01  K-
1SA    D      E      OB4    PP     OTA    OGO      .   01  KIOS    K-
1SA    D      K      OB4    PP     OTA    OGO      .   01  KIOS    E-
1SA    E      K      OB4    PP     OTA    OGO      .   01  KIOS    D-
1SA    AK     D      E      K      OB4    PP     OTA    OGO      .   01
KIOS   AK       .       .       .       .       .       .       .
1SA    D      E      K      PP     OTA    OGO      .   01  KIOS    OB4-
1SA    D      E      K      OB4    OB3    PP     OTA    OGO      .   01
KIOS   OB3      .       .       .       .       .       .       .
1SA    D      E      K      OB4    OB2    PP     OTA    OGO      .   01
OB2      .       .       .       .       .       .       .       .
1SA    D      E      K      OB4    OTA    OGO      .   01  PP-         .
```

444   Logic for OJ is on boards 232, 235, 236.

```
OSA    K      04     1TA    OJ       .   01  .           .           .
1SA    06     05     1TA    OJ       .   01  .           .           .
1SA    K      06     05     OTA    OJ       .   01  KA      K           .
1SA    05     OTA    OJ       .   01  06-        .           .           .
1SA    06     OTA    OJ       .   01  05A-       .           .           .
1SA    06     05     04     OTA    OJ       .   01  04B         .
```

445   Logic for OLTP is on boards 226, 319, 324.

```
OSA    LC     OB3    05        TP     1TA    OLTP     .   01  .           .
1SA    1TA    OLTP     .   01  .           .           .           .
1SA    05     OTA    OLTP     .   01  05A         .           .           .
1SA    OB3    OTA    OLTP     .   01  OB3         .           .           .
1SA    LC     OTA    OLTP     .   01  LC          .           .           .
1SA    TP     OTA    OLTP     .   01  TPB         .           .           .
```

446   Logic for OLO is on boards 211, 216, 219.

```
OSA     1TA    OLO     .      01    .        .        .      .        .       .
1SA     04     03      02     1TA   OLO      .        01    .        .       .
1SA     03     02      OTA    OLO   .        01  04B-         .        .       .
1SA     04     OTA     OLO    .     01  032-           .        .       .       .
```

447   Logic for OSAG is on boards 207, 219, 222.

```
OSA     AK     0B3     04     1TA   OSAG     .        01    .        OB2      .      01
1SA     D      E       K      OB5   0B4      0B2      1TA    OSAG     .      01
1SA     AK     0B5     0B3    0B2   OTA      OSAG     .      01  KIOS        .
1SA     D      E       K      0B5   0B4      OTA      OSAG   .      01  OB2-
1SA     D      E       K      0B4   0B2      OTA      OSAG   .      01  OB5-
1SA     D      E       K      0B5   0B4      0B2      04     OTA    OSAG
        .      01  04B        .        .        .        .        .      .        .       .
```

448   Logic for OSHB is on boards 208, 219, 223.

```
OSA     AK     0B4     0B2    1TA   OSHB     .        01    .        .       .
1SA     DSP    D       E      K     0B3      1TA      OSHB   .        01    .
1SA     DSP    D       E      0B3   OTA      OSHB     .      01  OSH    K-
1SA     DSP    D       K      0B3   OTA      OSHB     .      01  OSH    E-
1SA     DSP    E       K      0B3   OTA      OSHB     .      01  OSH    D-
1SA     AK     DSP     D      E     K        0B3      OTA    OSHB     .      01
OSH     AK     .       .      .     .        .        .      .        .
1SA     D      E       K      0B3   OTA      OSHB     .      01  OSH    DSP-
1SA     DSP    D       E      K     OTA      OSHB     .      01  OSH    0B3-
1SA     DSP    D       E      K     0B3      0B2      OTA    OSHB     .      01
OSH     0B2    .       .      .     .        .        .      .        .
1SA     DSP    D       E      K     0B4      0B3      OTA    OSHB     .      01
0B42    .       .       .      .     .        .        .      .        .
```

449   Logic for OTR is on board 214.

```
OSA     AK     0B3     0B2    PP    1TA      OTR      .      01    .        .
1SA     D      E       K      0B4   1TA      OTR      .      01    .        .
1SA     AK     0B3     OTA    OTR   .        01  KIOS          .        .
1SA     D      E       K      0B4   0B2      OTA      OTR    .      01  OB2
1SA     D      E       K      0B4   PP       OTA      OTR    .      01  PP
```

450   Logic for OTR4 is on boards 212, 213.

```
OSA     AK     0B3     0B2    04    PP       1TA      OTR4   .      01    .
1SA     D      E       K      0B4   X1       1TA      OTR4   .      01    .
1SA     AK     0B3     X1     OTA   OTR4     .        01  KIOS          .
1SA     D      E       K      0B4   0B2      X1       OTA    OTR4     .      01
0B2     .       .       .      .     .        .        .      .        .
1SA     D      E       K      0B4   PP       X1       OTA    OTR4     .      01
PP      .       .       .      .     .        .        .      .        .
1SA     D      E       K      0B4   04       X1       OTA    OTR4     .      01
04      .       .       .      .     .        .        .      .        .
1SA     D      E       K      0B4   OTA      OTR4     .      01  X1-           .
```

Tape stops | Marker number

451   Logic for OW is on board 211.

```
OSA    E      K      06     1TA    OW     .      01     .      .      .
1SA    05     03     1TA    OW     .      01     .      .      .      .
1SA    E      K      06     05     03     OTA    OW     .      01     K06
1SA    03     OTA    OW     .      01     05A-   .      .      .      .
1SA    05     OTA    OW     .      01     03A-   .      .      .      .
```

452   Logic for OWT is on board 228.

```
OSA    AK     OB4    OB3    1TA    OWT    .      01     .      .      .
1SA    D      E      G      K      OB2    1TA    OWT    .      01     .
1SA    AK     G      OB4    OB2    OTA    OWT    .      01     KIOA   .
1SA    D      E      G      K      OB3    OB2    OTA    OWT    .      01
OB3    .      .      .      .      .      .      .      .      .      .
1SA    D      E      G      K      OTA    OWT    .      01     OB2-   .
1SA    D      E      K      OB2    OTA    OWT    .      01     G-     .
```

453   Logic for OYAC is on boards 207, 320, 324.

```
OSA    AC     E      K      06     05     04     03     02     1TA
OYAC   .      01     .      .      01     .      .      .      .      .
1SA    1TA    OYAC   .      01     .      .      .      .      .      .
1SA    E      K      06     05     OTA    OYAC   .      01     K065   .
1SA    04     OTA    OYAC   .      01     04A    .      .      .      .
1SA    03     OTA    OYAC   .      01     032    03     .      .      .
1SA    02     OTA    OYAC   .      01     032    02     .      .      .
1SA    AC     OTA    OYAC   .      01     AC     .      .      .      .
```

454   Logic for OYB is on boards 211, 214.

```
OSA    K      OB6    OB5    OB4    OB3    OB2    1TA    OYB    .      01
1SA    1TA    OYB    .      01     .      .      .      .      .      .
1SA    K      OTA    OYB    .      01     K      .      .      .      .
1SA    OB6    OTA    OYB    .      01     OB6    .      .      .      .
1SA    OB5    OTA    OYB    .      01     OB5    .      .      .      .
1SA    OB3    OTA    OYB    .      01     OB3    .      .      .      .
1SA    OB4    OB2    OTA    OYB    .      01     OB42   .      .      .
```

455   Logic for OYR is on board 240.

```
OSA    CR5    CR3    E      K      06     05     04     03     02
1TA    OYR    .      01     .      01     .      .      .      .      .
1SA    1TA    OYR    .      01     .      .      .      .      .      .
1SA    E      K      06     05     OTA    OYR    .      01     K065   .
1SA    04     OTA    OYR    .      01     04     .      .      .      .
1SA    03     02     OTA    OYR    .      01     032    .      .      .
1SA    CR5    OTA    OYR    .      01     CR5    .      .      .      .
1SA    CR3    OTA    OYR    .      01     CR3    .      .      .      .
```

456   Logic for QT1 is on boards 321, 324, 339.

OSA	B3	1TA	QT1	.	01	.	D	1TA	QT1	.	01	.
1SA	B6	B4	B2	B1	D	1TA	QT1	QT1	01	B64-	01	B6-
1SA	B4	B2	B1	D	OTA	QT1	.	01	B64-	B4-		
1SA	B6	B2	B1	D	OTA	QT1	.	01	B64-	B4-		
1SA	B6	B4	B3	D	OTA	QT1	.	01	BL4	.		
1SA	B6	B4	B2	B1	OTA	QT1	.	01	D-	.		

463   A32 or test, one side. Logic for one side A32 is on boards 335, 339, 438.

OSA	CR4	D	E	K	05	0E18	1SA	1E18	1TF	
A32	.	01	.	.	.	.	.	.	.	
1SA	TO	TX	AP	0B5	06	03	A32	0E18	1SA	
1E18	1TF	A32	.	01	.	.	.	.	.	
OSA	CR3	D	E	K	0B5	05	0E18	1SA	1E18	
1TF	A32	.	02	.	.	.	.	.	.	
1SA	TO	TX	AP	06	03	A32	0E18	1SA	1E18	
1TF	A32	.	02	.	.	.	.	.	.	
OSA	C4	E	K	05	0E18	1SA	1E18	1TF	A32	
.	02	.	.	.	.	.	.	.	.	
1SA	TO	TX	AP	D	06	03	A32	0E18	1SA	
1E18	1TF	A32	.	03	.	.	.	.	.	
OSA	AC	AP	05	0E18	1SA	1E18	1TF	A32	.	04
1SA	TO	TX	K	03	A32	0E18	1SA	1E18	1TF	
A32	.	04	.	.	.	.	.	.	.	
OSA	AP	K	05	0E18	1SA	1E18	1TF	A32	.	05
.	.	.	.	.	.	.	.	.	.	

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1SA	TO	TX	AC	CR4	CR3	C4	E	03	A32	
0E18	1SA	1E18	1TF	A32	.	05	.	.	.	
OSA	AC	AP	K	05	03	0E18	1SA	1E18	1TF	
A32	.	06	.	.	.	.	.	.	.	
1SA	TO	TX	06	A32	0E18	1SA	1E18	1TF	A32	
.	06	.	.	.	.	.	.	.	.	
OSA	AC	AP	K	0E18	1SA	1E18	1TF	A32	.	07
1SA	TO	TX	05	03	A32	0E18	1SA	1E18	1TF	
A32	.	07	.	.	.	.	.	.	.	
OSA	AC	C4	D	E	K	06	05	04	03	
02	TSO	0E18	1SA	1E18	1TF	A32	.	08	.	
1SA	TO	C3	A32	0E18	1SA	1E18	1TF	A32	.	08
OSA	AC	C4	C3	D	E	K	06	05	04	
03	02	0E18	1SA	1E18	1TF	A32	.	09	.	
1SA	TO	TSO	A32	0E18	1SA	1E18	1TF	A32	.	09
OSA	AC	C4	E	K	06	05	04	03	02	
0E18	1SA	1E18	1TF	A32	.	10	.	.	.	

Tape stops	Marker number

457 Logic for TO1C is on board 206.

```
OSA   1TA   TO1C   .    01   .      .      .      .      .      .
1SA   TX    B6     B4   C3   TP     1TA    TO1C   .      01     .
1SA   TX    C3     TP   OTA  TO1C   .      01     B64-   .      .
1SA   TX    B6     B4   C3   OTA    TO1C   .      01     TPA-   .
1SA   B6    B4     C3   TP   OTA    TO1C   .      01     TX-    .
1SA   TX    B6     B4   TP   OTA    TO1C   .      01     C3-    .
```

458 Logic for TXP- is on board 338.

```
OSA   1TA   TXP-   .    01   .      .      .      .      .      .
1SA   TX    TP     1TA  TXP- .      01     .      .      .      .
1SA   TP    OTA    TXP- .    01     TX-    .      .      .      .
1SA   TX    OTA    TXP- .    01     TPA-   .      .      .      .
```

Flip-flop logic tests on logic for AX, A32, B6, B5, B4, B3, B2, B1, CL7, CL6, CL5, CL4, CL3, CL2, CP5, and CP4 flip-flops.

459 AX or test, one side. Logic for one side AX is on boards 315, 316.

```
OSA   A0    OE18   1SA   1E18   1TF   AX     .   01   .   .
1SA   AX    OE18   1SA   1E18   1TF   AX     .   01   .   .
```

NOTE
Marker 460 will indicate error if FALT network E board is defective.

460 AX and test, one side.

```
1SA   AX    A0    OE18   1SA   1E18   OTF   AX   .   01   A0
```

461 AX or test, zero side. Logic for zero side AX is on boards 314, 315.

```
OSA   AX    OE18   OSA   1E18   OTF   AX   .   01   .   .
1SA   A0    OE18   OSA   1E18   OTF   AX   .   01   .   .
```

462 AX and test, zero side.

```
1SA   OE18   OSA   1E18   1TF   AX   .   01   A0-   .   .
```

465
```
1SA    TO    C3    D     TSO   A32   OE18   1SA    1E18   1TF
A32    .     10    .     .     .     .      .      .      .
OSA    AC    D     E     K     06    05     04     03     02
A0     OE18  1SA   1E18  1TF   A32   .      11     .      .      .
1SA    TO    C3    TSO   A32   OE18  1SA    1E18   1TF    A32
.      11    .     .     .     .     .      .      .      .
OSA    TO    TX    OE18  1SA   1E18  1TF    A32    .      12     .
1SA    AP    CR4   CR3   C4    E     04     02     A32    A0
OE18   1SA   1E18  1TF   A32   .     12     .      .      .
```

```
466   A32 and test, one side.
      1SA      TO       TX          AC       AP       CR4      OB5      06       03       A32
      0E18     1SA      1E18        0TF      A32      .    01  CR4      .    02  OB5      .    03
      OMDL     D-       .    05  AP          .    12  TOB      TO       .        .        .
      1SA      TO       TX          AC       AP       CR3      06       03       A32      0E18
      1SA      1E18     0TF         A32      .    01  OB5-     .    02  CR3      .    03  OMDL
      D-       .    05  AP          .    12  TOB      TO       .        .        .
      1SA      TO       TX          AC       AP       C4       K        OB5      06       05
      04       02       A32         AO       0E18     1SA      1E18     0TF      A32      .    01
      OMD0     OMD      .    04  AP          .    05  AP       .    06  AP       .    07  AP
           12  TOB      TO          .        .        .        .        .
      1SA      TO       TX          AC       AP       C4       D        OB5      06       03
      A32      0E18     1SA         1E18     0TF      A32      .    01  OMD0     ED3      .    03
      C4       .    05  AP          .    12  TOB      TO       .        .        .

467   1SA      TO       TX          AC       AP       C4       E        K        06       05
      04       02       A32         AO       0E18     1SA      1E18     0TF      A32      .    02
      OMD0     .    04  AP          .    05  AP       .    06  AP       .    07  AP       .    12
      TOB      TO       .
      1SA      TO       TX          AC       AP       CR4      CR3      E        K        06
      05       04       02          A32      AO       0E18     1SA      1E18     0TF      A32
      .    03  OMDL     .    04  AP          .    05  AP       .    06  AP       .    07  AP
           12  TOB      TO          .        .        .        .        .
      1SA      TO       TX          CR4      CR3      C4       E        06       04       03
      02       A32      AO          0E18     1SA      1E18     0TF      A32      .    04  KB-
      .    05  AC-      .    06  03          .    07  05-      .    12  TOB      TO       .
      1SA      TO       TX          C4       E        04       02       A32      AO       0E18
      1SA      1E18     0TF         A32      .    06  06-      .    04  KB-      K-       .    05
      AC-      .    07  05-         .    12  TOB      TO       .        .        .

468   1SA      TO       AC          K        06       05       A32      0E18     1SA      1E18
      0TF      A32      .    07  TXA-        .    12  TOB      TO       .        .        .
      1SA      TO       TX          C4       D        A32      0E18     1SA      1E18     0TF
      A32      .    08  C4          .    04  KB-      K-       .    05  AC-      .    06  06-
      .    07  05-      .    09  C4          .    10  C4       .    12  TOB      TO       .
      1SA      TO       TX          C3       TSO      A32      AO       0E18     1SA      1E18
      0TF      A32      .    08  TSO         .    04  KB-      K-       .    05  AC-      .    06
      06-      .    07  05-         .    09  C3       .    10  DA-      D-       .    11  AO
           12  TOB      TO          .        .        .        .        .
      1SA      TO       TX          C3       TSO      A32      AO       0E18     1SA      1E18
      0TF      A32      .    10  DA-         .    08  TSO      .    04  KB-      K-       .    05
      06-      .    07  05-         .    08  TSO      .    09  C3       .    11  AO       .    12
      TOB      TO       .
      1SA      TO       TX          C4       TSO      A32      0E18     1SA      1E18     0TF
      A32      .    11  CTS         C3-      .    04  KB-      K-       .    05  AC-      .    06
      06-      .    07  05-         .    09  C4       .    12  TOB      TO       .
```

Tape stops	Marker number

```
469   1SA      TO       TX      C4         C3       A32       OE18      1SA       1E18      OTF
      A32      .    11  CTS     TSO-   .   04 .        04 KB-      K-        .    05 AC-       .    06
      06-      .    07  05-     .      08 C4       .    12 TOB      TO        .
      1SA      TO       TX      C4         C3       D         TSO       A32       OE18      1SA
      1E18     OTF      A32     .      11 D        .    04 KB-      K-        .    05 AC-
      .    06 06-      .    07  05-     .      10 C4       .    12 TOB      TO
      1SA      TO       AP      CR4        CR3      C3        E      04        02        TSO
      A32      OE18     1SA     1E18       OTF      A32       .    11 OYAC     .    12 TOB
      TO       .        .       .          .        .         .         .
      1SA      TO       AP      CR4        CR3      C4        E      04        02        A32
      AO       OE18     1SA     1E18       OTF      A32       .    12 TOB      .         .

470   A32 or test, zero side.  Logic for zero side A32 is on boards 337, 338, 339, 438.
      OSA      AP       D       E          K        05        A32       OE18      OSA       1E18
      OTA      A32   01 .       .          .        .         .         .         .
      1SA      TO       TX      CR4        OB5      06        03        OE18      OSA       1E18
      OTF      A32   01 .       .          .        .         .         .         .
      OSA      AP       D       E          K        OB5       05        A32       OE18      OSA
      1E18     OTF      A32     .      02 .        .         .         .         .
      1SA      TO       TX      CR3        06       03        OE18      OSA       1E18      OTF
      A32      .    02  .       .          .        .         .         .         .
      OSA      AP       E       K          05       A32       OE18      OSA       1E18      OTF
      A32      .    03  .       .          .        .         .         .         .
      1SA      TO       TX      C4         D        06        03        OE18      OSA       1E18
      OTF      A32   03 .       .          .        .         .         .         .
      OSA      AC       05      A32        OE18     OSA       1E18      OTF       A32       .    04
      1SA      TO       TX      AP         K        03        OE18      OSA       1E18      OTF
      A32      .    04  .       .          .        .         .         .         .
      OSA      CR4      CR3     C4         K        05        A32       OE18      OSA       1E18
      OTF      A32      .    05 .          .        .         .         .         .

471   1SA      TO       TX      AC         AP       E         03        OE18      OSA       1E18
      OTF      A32   05 .       .          .        .         .         .         .
      OSA      AC       K       05         03       A32       OE18      OSA       1E18      OTF
      A32      .    06  .       .          .        .         .         .         .
      1SA      TO       TX      AP         06       OE18      OSA       1E18      OTF       A32
      .    06  .        .       .          .        .         .         .         .    07
      OSA      AC       K       A32        OE18     OSA       1E18      OTF       A32       .    07
      1SA      TO       TX      AP         05       03        OE18      OSA       1E18      OTF
      A32      .    07  .       .          .        .         .         .         .
      OSA      AC       D       E          K        06        05        04        03        02
      TSO      A32      OE18    OSA        1E18     OTF       A32       .    08  .         .
```

```
        1SA        TO            C4          C3            OE18        OSA         1E18        OTF         A32          .     08
        OSA        AC            C3          D             E           K           06          05          04           03
        02         A32           OE18        OSA           1E18        OTF         A32          .     09    .           .
        1SA        TO            C4          TSO           OE18        OSA         1E18        OTF         A32          .     09
        OSA        AC            E           K             06          05          04          03          02           A32
        OE18       OSA           1E18        OTF           A32          .     10    .           .           .            .

472     1SA        TO            C4          C3            D           TSO         OE18        OSA         1E18         OTF
        A32         .     10     .           .             .           .           .           .           .            .
        OSA        AC            D           E             K           06          05          04          03           02
        A32        OE18          OSA         1E18          OTF         A32          .     11    .           .            .
        1SA        C3            TSO         AO            OE18        OSA         1E18        OTF         A32          .     11
        OSA        TX            E           K             05          A32         OE18        OSA         1E18         OTF
        A32         .     12     .           .             .           .           .           .           .            .
        1SA        06            04          03            OE18        OSA         1E18        OTF         A32          .     12

473     A32 and test, zero side.
        1SA        TO            TX          AC            CR3         C4          OB5         06          04           03
        OE18       OSA           1E18        1TF           A32          .     01   CR4-         .     02   OB5          .     03
        OMDL       D-             .     05   AP-            .     12    TXC         TX
        1SA        TO            TX          AC            CR4         C4          06          04          03           OE18
        OSA        1E18          1TF         A32            .     01   OB5-         .     02    CR3-        .     03     OMDL
        D-          .     05     AP-          .     12      TXC         TX
        1SA        TO            TX          AC            CR4         E           K           OB5         06           05
        02         OE18          OSA         1E18          1TF         A32          .     01   OMDO         .     04     AP-
         .    05   AP-            .     06   AP-            .     07    AP-
        1SA        TO            TX          AC            CR3         E           K           06          05           02
        OE18       OSA           1E18        1TF           A32          .     02   OMDO         .     04    AP-          .     05
        AP-         .     06     AP-          .     07      AP-
        1SA        TO            TX          AC            CR4         D           OB5         06          04           03
        OE18       OSA           1E18        1TF           A32          .     03   C4-          .     01    OMDO        ED3
        D           .     05     AP-          .     12      TXC         TX

474     1SA        TO            TX          AC            C4          E           K           06          05           02
        OE18       OSA           1E18        1TF           A32          .     03   OMDL         .     04    AP-          .
        AP-         .     06     AP-          .     07      AP-
        1SA        TO            TX          AP            E           06          03          02          OE18         OSA
        1E18       1TF           A32          .     04     KB-          .     05   AC-          .     06    03           .     07
        05-         .            .           .             .           .           .           .           .            .
        1SA        TO            TX          AP            E           02          OE18        OSA         1E18         1TF
        A32         .     06     06-          .     04     KB-         K-           .     05   AC-          .     07     05-
        1SA        TX            AC          AP            K           06          05          OE18        OSA          1E18
        1TF        A32            .     07   TOX-           .           .           .           .           .            .
        1SA        TO            TX          AP            D           OE18        OSA         1E18        1TF          A32
         .    08   C4-            .     04   KB-           K-           .     05   AC-          .     06    06-          .     07
        05-         .     09     C4-          .     10     C4-          .           .           .           .            .
        1SA        TO            TX          AP            C4          C3          TSO         OE18        OSA          1E18
        1TF        A32            .     08   TSO            .     04    KB-         K-           .     05   AC-          .     06
        06-         .     07     05-          .     09     C3           .     10   DA-         D-           .     11     AO-
```

Tape stops	Marker number											

```
        475   1SA      C4       D        0E18     0SA      1E18     1TF      A32        .      08  TOA-
               .     09 TOA-   TO-        .     10 TOA-    TO-       .        .          .          .
              1SA      C4       D        0E18     0SA      1E18     1TF      A32        .      09  TOA-
               .     08 TOA-   TO-        .     10 TOA-    TO-       .        .          .          .
              1SA      TO       TX        AP               C4       TSO      0E18      0SA         1E18
              1TF      A32       .     10 DA-            04 KB-     K-        .      05 AC-         .    06
              06-       .     07 05-       .     08 TSO-     .     09 C3      .      11 AO-         .
              1SA      C4       D        0E18     0SA      1E18     1TF      A32        .      10  TOA-
               .     08 TOA-   TO-        .     09 TOA-    TO-       .        .          .          .
              1SA      AO      0E18      0SA     1E18     1TF      A32        .      11 CTS          .
              1SA      C3       D        TSO      AO       0E18     0SA      1E18     1TF        A32
               .     11 D        .        .        .        03       02       TSO      AO        0E18
              0SA      1E18     1TF      A32        .     11 0YAC     .     12 OM        E          .

        476   1SA      E        02       0E18     0SA      1E18     1TF      A32        .      12  OM
              1SA      TX       06       04       03       0E18     0SA      1E18     1TF        A32
               .     12 TXC      .        .        .        .        .        .        .          .

        477   B6 or test, one side.  Logic for one side B6 is on board 226.
              0SA      B5       B3       0E18     1SA      1E18     1TF      B6         .      01   .
              1SA      TO       B6       B2       B1       0E18     1SA      1E18     1TF        B6
               .     01   .        .        .        .        .        .        .        .          .

        478   B6 and test, one side.
              1SA      TO       B2       B1       0E18     BSC      B6       1E18     OTF        B6
               .     01 B6-      .        .        .        .        .        .        .          .
              1SA      TO       B6       B5       B3       0E18     1SA      1E18     OTF        B6
               .     01 B5L4     .        .        .        .        .        .        .          .
              1SA      B6       B2       B1       0E18     1SA      1E18     OTF      B6         .    01
              TO-       .        .        .        .        .        .        .        .          .

        479   B6 or test, zero side.  Logic for zero side B6 is on boards 226, 228.
              0SA      B6       TSO      0E18     0SA      1E18     OTF      B6         .      01   .
              1SA      TO      0E18      0SA     1E18     OTF      B6        .      01   .          .
              0SA      TO       B6       0E18     0SA      1E18     OTF      B6        .      02   .
              1SA      TSO     0E18      0SA     1E18     OTF      B6        .      02   .          .

        480   B6 and test, zero side.
              1SA      TO       TSO      0E18     0SA      1E18     1TF      B6         .      01  T32
               .     02 TOA     TO        .        .        .        .        .        .          .
              1SA      TO       TSO      0E18     0SA      1E18     1TF      B6         .      02  TOA
               .     01 T32      TSO      .        .        .        .        .        .          .
```

```
481   B5 or test, one side.  Logic for one side B5 is on boards 440, 441.
      0SA       B4        B3        0E18      1SA       1E18      1TF       B5        .    01   .
      1SA       TO        B5        B2        B1        0E18      1SA       1E18      1TF       B5
      .    01   .         .         .         .         .         .         .         .         .

482   B5 and test, one side.
      1SA       TO        B5        B4        B2        B1        0E18      1SA       1E18      0TF
      B5        .    01   TBS       B4        .         .         .         .         0TF       B5        .         01
      1SA       TO        B5        B3        0E18      1SA       1E18      0TF       B5        .    01
      BL4       .         .         .         .         .         .         .         .         .
      1SA       B5        B2        B1        0E18      1SA       1E18      0TF       B5        .         01
      TO-       .         .         .         .         .         .         .         .

483   B5 or test, zero side.  Logic for zero side B5 is on board 441.
      0SA       B5        B3        0E18      0SA       1E18      0TF       B5        .    01   .
      1SA       TO        B2        B1        0E18      0SA       1E18      0TF       B5        .         01
      0SA       TO        B5        B2        B1        0E18      0SA       1E18      0TF       B5
      02        .         .         .         .         .         .         .         .
      1SA       B3        0E18      0SA       1E18      0TF       B5        .    02   .         .

484   B5 and test, zero side.
      1SA       TO        B3        0E18      0SA       1E18      1TF       B5        .    01   B5L4
      .    02   TOA       TO        .         .         .         .         .         .
      1SA       TO        B3        0E18      0SA       1E18      1TF       B5        .    02   TOA

485   B4 or test, one side.  Logic for one side B4 is on board 440.
      0SA       B3        0E18      1SA       1E18      1TF       B4        .    01   .         .
      1SA       TO        B5        B4        B2        B1        0E18      1SA       1E18      1TF
      B4        .    01   .         .         .         .         .         .         .         .

486   B4 and test, one side.
      1SA       TO        B4        B2        B1        0E18      1SA       1E18      0TF       B4
      .    01   B5-       .         .         .         .         .         .         .
      1SA       TO        B5        B4        B3        0E18      1SA       1E18      0TF       B4
      .    01   BL4       .         .         .         .         .         .         .
      1SA       B5        B4        B2        B1        0E18      1SA       1E18      0TF       B4
      .    01   TO-       .         .         .         .         .         .         .

487   B4 or test, zero side.  Logic for zero side B4 is on board 440.
      0SA       B5        B4        B3        0E18      0SA       1E18      0TF       B4        .         01
      1SA       TO        B2        B1        0E18      0SA       1E18      0TF       B4        .         01
      0SA       TO        B4        B2        B1        0E18      0SA       1E18      0TF       B4
      .    02   .         .         .         .         .         .         .
      1SA       B5        B3        0E18      0SA       1E18      0TF       B4        .    02   .

488   B4 and test, zero side.
      1SA       TO        B5        B3        0E18      0SA       1E18      1TF       B4        .         01
      B5L4      .    02   TOA       TO        .         .         .         .         .         .         02
      1SA       TO        B5        B3        0E18      0SA       1E18      1TF       B4        .         02
      TOA       .         .         .         .         .         .         .         .
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Tape stops	Marker number

```
489   B3 or test, one side.  Logic for one side B3 is on boards 207, 208.
      OSA    B2      OE18   1SA    1E18   1TF    B3      .    01    .         .
      1SA    TO      B3     OE18   1SA    1E18   1TF    B3      .        01   .
      OSA    TO      OE18   1SA    1E18   1TF    B3      .    02    .         .
      1SA    B3      B2     OE18   1SA    1E18   1TF    B3      .        02   .

490   B3 and test, one side.
      1SA    TO         B3  B2     OE18   1SA    1E18   OTF    B3        .    01
      B2      .   02  TOA   TO      .      .      .      .      .        .
      1SA    TO         B3  B2     OE18   1SA    1E18   OTF    B3        .    02
      TOA     .   01  B2     .      .      .      .      .      .        .

491   B3 or test, zero side.  Logic for zero side B3 is on board 208.
      OSA    B3      OE18   OSA    1E18   OTF    B3      .    01    .         .
      1SA    TO      B2     OE18   OSA    1E18   OTF    B3      .        01   .

492   B3 and test, zero side.
      1SA    TO      OE18   OSA    1E18   1TF    B3      .    01   B2-        .
      1SA    B2      OE18   OSA    1E18   1TF    B3      .    01   TO-        .

493   B2 or test, one side.  Logic for one side B2 is on board 340.
      OSA    B1      OE18   1SA    1E18   1TF    B2      .    01    .         .
      1SA    TO      B2     OE18   1SA    1E18   1TF    B2      .        01   .

494   B2 and test, one side.  No test for 01 B2-.
      1SA    TO         B2  B1     OE18   1SA    1E18   OTF    B2        .    01
      B1      .      .      .      .      .      .      .      .
      1SA    B2      OE18   1SA    1E18   OTF    B2      .        01   TO-    .

495   B2 or test, zero side.  Logic for zero side B2 is on board 340.
      OSA    B2      OE18   OSA    1E18   OTF    B2      .    01    .         .
      1SA    TO      B1     OE18   OSA    1E18   OTF    B2      .        01   .
      OSA    TO         B2  B1     OE18   OSA    1E18   OTF    B2        .    02
      1SA    OE18    OSA    1E18   OTF    B2      .   02   .      .         .

496   B2 and test, zero side.
      1SA    TO      OE18   OSA    1E18   1TF    B2      .    01   B1-        .    02
      TOA    TO       .      .      .      .      .      .      .        .
      1SA    TO      OE18   OSA    1E18   1TF    B2      .    02   TOA        .    01
      B1-     .      .      .      .      .      .      .      .        .

497   B1 or test, one side.  Logic for side B1 is on board 232.
      OSA    OE18    1SA    1E18   1TF    B1      .    01    .      .         .
      1SA    TO         B3  B1     OE18   1SA    1E18   1TF    B1        .    01
```

```
498   B1 and test, one side.
      1SA      TO          B1        OE18     1SA       1E18      OTF       B1        .     01 B3-
      1SA      TO          B5        B3       OE18      BSC       B1        1E18      OTF      B1
      .     01 B1-         .         .        .         .         .         .         .     01 .
      1SA      B3          B1        OE18     1SA       1E18      OTF       B1        .     01 T0-

499   B1 or test, zero side.  Logic for zero side B1 is on boards 232, 441.
      OSA      B4          B1        OE18     OSA       1E18      OTF       B1        .     01 .
      1SA      TO          B5        B3       OE18      OSA       1E18      OTF       B1             .  01
      OSA      B3          B2        B1       OE18      OSA       1E18      OTF       B1             .  02
      1SA      TO          B6        OE18     OSA       1E18      OTF       B1        .     02 .
      OSA      B6          B2        B1       OE18      OSA       1E18      OTF       B1             .  03
      1SA      TO          B4        B3       OE18      OSA       1E18      OTF       B1        .        03
      OSA      TO          B5        B1       OE18      OSA       1E18      OTF       B1        .        04
      1SA      B6          B2        OE18     OSA       1E18      OTF       B1        .     04 .

500   B1 and test, zero side.
      1SA      TO          B3        OE18     OSA       1E18      1TF       B1        .     01 TBS
      B5-      .        02 B3        .     03 TOP       B4-       .      04 TOA       TO        .
      1SA      TO          B5        B2       OE18      OSA       1E18      1TF       B1        .        01
      B3-      .        02 B2        .     04 TOA       TO        .         .         .         .
      1SA      TO          B5        B3       B1        OE18      BSC       B1        1E18      1TF
      B1       .        01 B1        .     02 B3        .      03 TOP       B4-       .      04 TOA
      TO       .           .         .        .         .         .         .         .         .
      1SA      TO          B6        B3       OE18      OSA       1E18      1TF       B1        .        03
      TOP      .        01 TBS       B5-      .     02 B3        .      04 TOA       TO        .
      1SA      TO          B5        B4       B3        B2        OE18      OSA       1E18      1TF
      B1       .        03 B2        .     01 TBS       B4        .      04 TOA       TO
      1SA      TO          B6        B3       B2        OE18      OSA       1E18      1TF       B1
      .     04 TOA        .       01 TBS      B5-       .         .         .         .         .

                                      NOTE
           Marker 501 will indicate error E4 if matrix is improperly set.

501   CL7 or test, one side.  Logic for one side CL7 is on boards 217, 218, 403, 404.
      OSA      B5          IP        K        OE18      1SA       1E18      1TF       CL7       .        01
      1SA      CL7         OE18      1SA      1E18      1TF       CL7       .      01 .         .
      OSA      B4          K         S        OE18      1SA       1E18      1TF       CL7       .        02
      1SA      B5          CL7       IP       OE18      1SA       1E18      1TF       CL7       .        02
      OSA      B4          IP        K        OE18      1SA       1E18      1TF       CL7       .        03
      1SA      B5          CL7       S        OE18      1SA       1E18      1TF       CL7       .        03
      OSA      TX          AK        D4       D3        D2        OB4       OB2       05        04
      OE18     1SA         1E18      1TF      CL7       .      04 .         .         .         .
      1SA      B2          CL7       D1       D         E         K         OB3       03        02
      OE18     1SA         1E18      1TF      CL7       .      04 .         .         .         .
      OSA      TX          AC        AK       CP4       CP3       OB2       02        E2        OE18
      1SA      1E18        1TF       CL7      .      05 .         .         .         .
      1SA      B2          CL7       CP2      DSP       D         E         K         OB3       03
      E1       E3          E4        OE18     1SA       1E18      1TF       CL7       .      05 .
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Tape   Marker
stops   number

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502    OSA    TX     AC     AK     OB2    03     E1     E3     OE18   1SA
       1E18   1TF    CL7    .  06  .      .      .      .      .      .
       1SA    B2     CL7    CP4    CP3    CP2    DSP    D.     E      K
       OB3    02     E2     OE18   1SA    1E18   1TF    CL7    .  06  .
       OSA    TX     AC     AK     CP4    CP2    OB2  07  03   02     E1
       E2     OE18   1SA    1E18   1TF    CL7    .  07  .     .
       1SA    B2     CL7    CP3    DSP    D      E   07  K     OB3    E3
       E4     OE18   1SA    1E18   1TF    CL7    .  07  .     .
       OSA    TX     AC     AK     CP5    CP4    OB2    E3     OE18   1SA
       1E18   1TF    CL7    .  08  .      .      .      .      .      .
       1SA    B2     CL7    CP3    CP2    DSP    D      E      K      OB3
       04     03     02     E1     E2     E4     OE18   1SA    1E18   1TF
       CL7    .  08  .      .      .      .      .      .      .
       OSA    B6     E      TSO    OE18   1SA    1E18   1TF    CL7    .  09
       .      .      .      .      .      .      .      .      .      .

503    1SA        AK     CL7    D      K      OE18   1SA    1E18   1TF    CL7
       .  09      .      .      .      .      .      .      .      .
       OSA        TX     AK     E      05     OE18   1SA    1E18   1TF    CL7
       .  10      .      .      .      .      .      .      .
       1SA        CL7    CL2    D      K      NC     04     OE18   1SA    1E18
       1TF        CL7    .  10  .      .      .      .      .      .

504    CL7 and test, one side.
       1SA    B2     CL7    D1     D      E      IP     OB3    03     02
       OE18   1SA    1E18   OTF    CL7    .  01  IP     .  02  TBS    B5-
       .  04  OTC    K-     .      .      .      .      .      .
       1SA    TX     AC     B6     B5     B4     CL7    CP5    D4     D3
       D2     OB4    OB2    05     TSO    S      E6     OE18   1SA    1E18
       OTF    CL7    .  01  KB5    .  03  TBS    B4     .      .      .
       1SA    B5     B2     CL7    D1     D      E      IP     OB3    03
       02     S      OE18   1SA    1E18   OTF    CL7    .  02  S      .  03
       IP     .  04  OCT    K-     .      .      .      .      .
       1SA    B5     B2     CL7    D1     D      E      OB3    03     02
       OE18   1SA    1E18   OTF    CL7    .  02  IP-    .  01  KB5    B5
       .  03  S-     .  04  OCT    K-     .      .      .
       1SA    B4     B2     CL7    D1     D      E      IP     OB3    03
       02     OE18   1SA    1E18   OTF    CL7    .  02  TBS-   .  01  IP
       .  04  OCT    .      K-     .      .      .      .      .      .
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505   1SA   TX    AC        B6      B5    CL7    CP5     D4      D3      D2
      IP    K     OB4       OB2     05    TSO    E6      OE18    1SA     1E18
      OTF   CL7   .      02 KA      .     .      .       .       .
      1SA   B5    B4        B2      CL7   D1     D       E       OB3     03
      02    S     OE18      1SA     1E18  OTF    CL7     .    03 TBS     .     01
      KB5   B5    .      04 OCT     K-    .      .       .       .       .
      1SA   TX    AC        B6      B5    CL7    CP5     D4      D3      D2
      K     OB4   OB2       05      TSO   S      E6      OE18    1SA     1E18
      OTF   CL7   .      03 KA      .     .      .       .       .
      1SA   AC    B2        CL7     CL2   CP5    D1      D       E       K
      NC    OB3   04        E6      OE18  1SA    1E18    OTF     CL7     .     04
      OL4   .  01 KB5       KB      K     .   10 KSU1    KED2    E       .
      1SA   TX    B6        B5      B4    CL7    D1      OB4     OB2     05
      03    02    TSO       S       OE18  1SA    1E18    OTF     CL7     .     04
      OCT   .  01 KB5       B5      .  03 TBS    B4      .       .       .

506   1SA   B2    CL7       CP2     DSP   D4     D3      D1      D       E
      K     OB3   03        02      E1    E3     E4      OE18    1SA     1E18
      OTF   CL7   .      04 D43     .  01 KB5    KB      K       .    05 02A
      02    .     .
      1SA   B2    CL7       CP2     DSP   D2     D1      D       E       K
      OB3   03    02        E1      E3    E4     OE18    1SA     1E18    OTF
      CL7   .  04 D2        .    01 KB5   KB     K       .    05 02A     02
      1SA   B2    CL7       CP2     DSP   D      E       K       OB3     03
      02    E1    E3        E4      OE18  1SA    1E18    OTF     CL7     .     04
      D1-   .  01 KB5       KB      K     .   05 02A     02      .       .
      1SA   CL7   CL2       CP2     DSP   D      E       K       NC      OB3
      04    B2    E1        E3      E4    OE18   1SA     1E18    OTF     CL7
      .  05 03-   .         CP2     KB    K      .    10 KSU1    KED2    E       K
      1SA   CL7   CP2       DSP     D4    03     D2      D       E       E4      OE18
      OB4   B2    OB3       05      03    02     E1      E3      E4      KB      K
      1SA   1E18  OTF       CL7     .  05 02A    .    01 KB5     KB      K

507   1SA   B2    CL7       DSP     D1    D      E       K       OB3     03
      OE18  1SA   1E18      OTF     CL7   .   05 CPL6    .    01 KB5     KB
      K     .  04 OL4       032-    02-   .      .       .       .       .
      1SA   CL7   CP4       CP3     CP2   DSP    D4      D3      D2      D
      E     K     OB4       OB3     05    04     03      02      E2      E4
      B2    OE18  1SA       1E18    OTF   CL7    .    06 03      .    01 KB5
      KB    K     .      08 CPL4    CP4   .      .       .       .       .
      1SA   CL7   CL2       CP4     CP3   CP2    DSP     D       E       K
      NC    B2    OB3       04      E2    OE18   1SA     1E18    OTF     CL7
      .  06 .     .      01 KB5     KB    K      .    10 KSU1    KED2    E       .
      02-   .  01 KB5       KB      K     .   10 KSU1    KED2    E       .
      1SA   B2    CL7       CP3     DSP   D1     D       E       K       OB3
      02    E3    E4        E6      OE18  1SA    1E18    OTF     CL7     .     06
      CPL0  .  01 KB5       KB      K     .   04 OL4     032-    03-     .     07
      032   02    .         .       .     .
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Tape   Marker
stops   number

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508   1SA      CL7      CP3      DSP      D4       D3       D2       D        E        K
      OB4      B2       OB3      05       03       E3       E4       OE18     1SA      1E18
      OTF      CL7      .    07  032      .    01  KB5      KB       K        .        .
      1SA      CL7      CL2      CP4      CP3      CP2      DSP      D        E        K
      NC       B2       OB3      04       E2       OE18     1SA      1E18     OTF      CL7
      .    07  CPL5     .    01  KB5      KB       K        .    06  02-      .    10  KSU1
      KED2     E        .        .        .        .        .        .        .        .
      1SA      CL7      CP3      CP2      DSP      D4       D3       D2       D        E
      K        B2       OB4      OB3      05       02       E1       E2       E4       OE18
      1SA      1E18     OTF      CL7      .    08  OL0      .    01  KB5      KB       K
      .    06  CPL0     CP4-     .        .        .        .        .        .        .
      1SA      B2       CL7      CL2      CP5      CP3      CP2      DSP      D1       D
      E        K        NC       OB3      04       03       02       E1       E2       E4
      OE18     1SA      1E18     OTF      CL7      .    08  CP5      .    01  KB5      KB
      K        .    04  OL4      04B      04       .    10  KSU1     KED2     E        .

509   1SA      B2       CL7      CL2      CP4      CP3      CP2      DSP      D1       D
      E        K        NC       OB3      04       03       02       E2       OE18     1SA
      1E18     OTF      CL7      .    08  CPL4     .    01  KB5      KB       K        .    04
      OL4      04B      04       .    06  03       .    10  KSU1     KED2     E        .
      1SA      B6       B5       B4       CL7      CP3      CP2      OB2      05       04
      03       B2       02       TSO      S        E1       E2       E4       OE18     1SA
      1E18     OTF      CL7      .    08  OSH      .    01  KB5      B5       .    03  TBS
      B4       .        .        .        .        .        .        .        .        .
      1SA      AC       B2       CL7      CL2      CP3      CP2      DSP      D1       D
      E        K        NC       OB3      04       03       02       E1       E2       E4
      OE18     1SA      1E18     OTF      CL7      .    08  AC       .    01  KB5      KB
      K        .    04  OL4      04B      04       .    10  KSU1     KED2     E        .
      1SA      TX       CL7      CP3      CP2      DSP      D        E        K        OB3
      04       B2       03       02       E1       E2       E4       OE18     1SA      1E18
      OTF      CL7      .    08  TXF      TX       .    01  KB5      KB       K        .
      1SA      CL7      CP3      CP2      DSP      D        E        K        OB3      04
      03       02       E1       E2       E4       OE18     1SA      1E18     OTF      CL7
      .    08  TXF      B2-      .    01  KB5      KB       K        .        .        .

510   1SA      TX       AC       B5       B4       CL7      CP5      D4       D3       D2
      OB4      OB2      05       S        E6       OE18     1SA      1E18     OTF      CL7
      .    09  KSU0     .    01  KB5      B5       .    03  TBS      B4       NC       .
      1SA      AK       B6       CL7      CL2      D        K        NC       04       TSO
      OE18     1SA      1E18     OTF      CL7      .    09  T32      .    01  KB5      KB
      K        .    10  KSU1     AK       .        .        .        .        .        .
      1SA      AC       B6       B5       B4       CL7      CL2      CP5      NC       OB2
      04       TSO      S        E6       OE18     1SA      1E18     OTF      CL7      .    10
      KSU1     .    01  KB5      B5       .    03  TBS      B4       .        .        .
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        1SA      CL7    CL2       CP2  .   DSP    D      K        NC     0B3      05
        04    10 03     E1     01 E3       E4     0E18   1SA   09 1E18   OTF      CL7
        .        05     .         KB5      KB     K      .        KSU0   AKA-     AK-
        1SA      CL7    CP2       DSP      D      K      NC       0B3    04
        E1    01 E3     E4        0E18     1SA    1E18   OTF      CL7    .     10 CL2-
        .        KB5    KB        K        .   09 KSU0   AKA-     AK-    .        .

511     1SA      CL7    CL2       CP2      DSP    D      K        0B3    04       03
        E1    01 E3     E4        0E18     1SA    1E18   OTF      CL7    .     10 NC-
        .        KB5    KB        K        .   09 KSU0   AKA-     AK     .        .
        1SA      TX     CL7       CL2      D      K      NC       0E18   1SA      1E18
        OTF      CL7    .      10 04X      .   01 KB5    KB       K      .     09 KSU0
        AKA-     AK-    .         .        .      .      .        .      .        .

512     CL7 or test, zero side.  Logic for zero side is on board 218.
        0SA      B5     B4        CL7      K      0E18   0SA      1E18   OTF      CL7
        .     01 .      .         .        .      .
        1SA      IP     TP        0E18     0SA    1E18   OTF      CL7    .     01 .
        0SA      CL7    IP        K        0E18   0SA    1E18     OTF    CL7    .        02
        1SA      B5     B4        TP       0E18   0SA    1E18     OTF    CL7    .        02
        0SA      B4     CL7       IP       TP     0E18   0SA      1E18   OTF    CL7
        .     03 .      .         .        .      .      .
        1SA      B5     K         0E18     0SA    1E18   OTF      CL7    .     03 .

513     CL7 and test, zero side.
        1SA      TP     0E18      0SA      1E18   1TF    CL7      .   01 IP-    .        02
        B4-      .   03 TPA       TP       .      .      .        .      .      .
        1SA      B5     IP        K        TP     0E18   0SA      1E18   1TF    CL7
        .     01 KB5    .      03 TPA      TP     .      .        .      .      .
        1SA      B5     B4        K        TP     0E18   0SA      1E18   1TF    CL7
        .     02 KA     .      03 TPA      TP     .      .        .      .      .        03
        1SA      B5     K         TP       0E18   0SA    1E18     1TF    CL7    .        03
        TPA      .      .         .        .      .      .        .      .      .

514     CL6 or test, one side.  Logic for one side CL6 is on boards 316, 317, 403.
        0SA      B5     CL7       K        0E18   1SA    1E18     1TF    CL6    .        01
        1SA      B1     CL6       0E18     1SA    1E18   1TF      CL6    .   01 .
        0SA      B1     CL7       K        0E18   1SA    1E18     1TF    CL6    .        02
        1SA      B5     CL6       0E18     1SA    1E18   1TF      CL6    .   02 .
        0SA      TX     AK        IP       0B4    0B2    05       E1     E3     0E18
        1SA      1E18   1TF       CL6      .   03 .      .        .      .      .
        1SA      B2     CL6       CP5      CP4    CP3    CP2       D      E      K
        0B3      04     E2        0E18     1SA    1E18   1TF      CL6    .   03 .
        0SA      TX     AK        CP5      CP3    CP2       04    0B4    0B2    05       E3
        0E18     1SA    1E18      1TF      CL6    .   04 .        K      0B3    04       03
        1SA      B2     CL6       CP4      D      E      K        0B3    04       03
        02       E1     E2        E4       0E18   1SA    1E18     1TF    CL6    .        04
        0SA      TX     AK        CP4      0B4    0B2    05       03     02     0E18
        1SA      1E18   1TF       CL6      .   05 .      .        .      .      .
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Tape stops	Marker number												

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stops   number

        515     1SA     B2      CL6     D       E       IP      05  K       OB3     04      E6
                0E18    1SA     1E18    1TF     CL6     .           .       .       .       .

        516     CL6 and test, one side.
                1SA     B2      CL7     CL6     CP5     CP4     CP3     CP2     D       E
                IP      OB3     04      0E18    1SA     1E18    OTF     CL6     .   01  CL7
                .   02  CL7     .   05  OCT     K-      .       .       .       .
                1SA     TX      AK      B5      B1      CL6     OB4     OB2     05      E3
                E6      0E18    1SA     1E18    OTF     CL6     .   01  KB5     .   02  B1
                1SA     TX      AK      B5      CL6     K       OB4     OB2     05      E3
                E6      0E18    1SA     1E18    OTF     CL6     .   02  KA      .       .
                1SA     B2      CL6     CP4     CP3     CP2     D       E       K       OB3
                04      E2      0E18    1SA     1E18    OTF     CL6     .   03  CP5-    .   01
                KB5     KB      K       .   02  KA      K       .   02  IP-     .
                1SA     B2      CL6     CP5     D       E       K       OB3     04      E6
                0E18    1SA     1E18    OTF     CL6     .   03  CPL0    .   01  KB5     KB
                K       .   02  .       KA      K       .   05  IP-     .       .       .

        517     1SA     B2      CL6     CP5     CP4     D       E       K       OB3     04
                03      02      E1      E2      E4      0E18    1SA     1E18    OTF     CL6
                .   04  CP5     .   01  KB5     KB      K       .   02  KA      K       .
                1SA     B2      CL6     D       E       K       OB3     04      03      02
                E3      0E18    1SA     1E18    OTF     CL6     .   04  CPL3    .   01  KB5
                KB      K       .   02  KA      K       .       .       .
                1SA     B2      CL6     CP4     D       E       K       OB3     04      E1
                E2      E4      0E18    1SA     1E18    OTF     CL6     .   04  032-    .   01
                KB5     KB      K       .   02  KA      K       .   05  IP-     .       .
                1SA     B2      CL6     D       E       IP      K       OB3     04      03
                E3      E6      0E18    1SA     1E18    OTF     CL6     .   05  032     .   01
                KB5     KB      K       .   02  KA      K       .       .       .
                1SA     TX      AK      B5      B1      CL7     CL6     IP      OB4     OB2
                05      04      E6      0E18    1SA     1E18    OTF     CL6     .   05  OCT

        518     1SA     B2      CL6     D       E       IP      K       OB3     E6      0E18
                1SA     1E18    OTF     CL6     .   05  04A-    .   01  KB5     KB      K
                .   02  KA      K       .       .       .       .

        519     CL6 or test, zero side.  Logic for zero side CL6 is on boards 316, 317.
                0SA     CL6     K       0E18    0SA     1E18    OTF     CL6     .   01  .
                1SA     CL7     0E18    0SA     1E18    OTF     CL6     .   01  .       .
                0SA     CL6     OB3     0E18    0SA     1E18    OTF     CL6     .   02  .
                1SA     K       0E18    0SA     1E18    OTF     CL6     .   02  .
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520    CL6 and test, zero side.
       1SA     OE18    OSA     1E18    1TF     CL6     .    01 CL7-    .    02 KA-
       K-      .       .       .       .       .       .       .       .
       1SA     CL7     K       OB3     OE18    OSA     1E18    1TF     CL6     .    01
       KA      .    02 OB3     .       .       .       .       .       .       .
       1SA     OE18    OSA     1E18    1TF     CL6     .    02 KA-     .    01 CL7-

521    CL5 or test, one side.  Logic for one side CL5 is on boards 329, 330, 332, 337.
       OSA     B5      CL6     K       OE18    1SA     1E18    1TF     CL5     .    01
       1SA     B1      CL5     OE18    1SA     1E18    1TF     CL5    01       .
       OSA     B1      CL6     K       OE18    1SA     1E18    1TF     CL5     .    02
       1SA     B5      CL5     OE18    1SA     1E18    1TF     CL5     .    02  .
       OSA     B4      04      OE18    1SA     1E18    1TF     CL5     .    03  .
       1SA     B6      B5      B3      B2      B1      CL5     K       MC      OE18
       1SA     1E18    1TF     CL5     .    03  .       .       .       .       .
       OSA     B3      OE18    1SA     1E18    1TF     CL5     .    04  .       .
       1SA     B6      B4      B2      B1      CL5     K       MC     04       OE18
       1SA     1E18    1TF     CL5     .    04  OE18    1SA     1E18    1TF     CL5
       OSA     B4      B2      B1      CL3     OE18    1SA     1E18    1TF     CL5
       .    05  .
       1SA     B6      B5      B3      CL5     K       OE18    1SA     1E18    1TF
       CL5     .    05  .       .       .       .       .       .       .       .

522    CL5 and test, one side.
       1SA     CL6     CL5     OE18    1SA     1E18    OTF     CL5     .    01 CL6
       .    02 CL6     .
       1SA     B5      B1      CL5     CL3     OE18    1SA     1E18    OTF     CL5
       .    01 KB5     .    02 B1
       1SA     CL5     CL3     K       OE18    1SA     1E18    OTF     CL5     .    02
       KA      .    01 KB5     KB      K       .       .       .       .       .
       1SA     B6      B5      CL5     CL3     K       MC      OE18    1SA     1E18
       OTF     CL5     .    03 BLO     .    02 KA      K       .       .       .
       1SA     B6      B5      B3      B2      B1      CL5     K       OE18    1SA
       1E18    OTF     CL5     .    03 MC-     .       .       .       .       .
       1SA     B6      B5      B3      B2      B1      CL5     K       MC      04
       OE18    1SA     1E18    OTF     CL5     .    03 04A     .       .       .
       1SA     B3      B2      B1      CL6     CL5     MC      OE18    1SA     1E18
       OTF     CL5     .    03 KTRS    .    01 CL6     .       .       .       .
```

Tape stops	Marker number										

523
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1SA     B6      B4      B2      B1      CL6     CL5     MC      04      0E18
1SA     1E18    OTF     CL5     .   04  KA-     .   01  CL6     .
1SA     B6      B4      B2      B1      CL5     K       04      0E18    1SA
1E18    OTF     CL5     .   04  MC-     .   01  KB5     KB      K       .
1SA     B6      B4      B2      B1      CL5     K       MC      0E18    1SA
1E18    OTF     CL5     .   04  04A-    .   01  KB5     KB      K       .
1SA     B2      B1      CL5     K       MC      04      0E18    1SA     1E18
OTF     CL5     .   04  T1      B64-    .   01  KB5     KB      K       .
1SA     B6      B4      B3      CL5     K       MC      04      0E18    1SA
1E18    OTF     CL5     .   04  T1      BL4     .   01  KB5     KB      K
.   02  KA      K               .               .       .       .
1SA     B6      B5      B2      CL5     K       0E18    1SA     1E18    OTF
CL5     .   05  BL3     .   02  KA      K       .       .       .       .
```

524
```
1SA     B6      B5      B3      CL5     CL3     K       0E18    1SA     1E18
OTF     CL5     .   05  CL3     .   02  KA      K       .       .       .
1SA     B3      CL6     CL5     0E18    1SA     1E18    OTF     CL5     .   05
KTRS    .   01  CL6     .   02  CL6     .       .       .       .       .
```

525   CL5 or test, zero side. Logic for zero side CL5 is on boards 329, 330, 331.
```
OSA     CL5     K       0E18    OSA     1E18    OTF     CL5     .   01  .
1SA     TO      CL6     0E18    OSA     1E18    OTF     CL5     .   01  .
OSA     B4      CL5     LP      0E18    OSA     1E18    OTF     CL5     .   02
1SA     TO      B6      B5      B3      K       0E18    OSA     1E18    OTF
CL5     .   02  .               .       .       .
OSA     B4      B3      B1      CL5     0E18    OSA     1E18    OTF     CL5
.   03  .               .       .       .       .
1SA     TO      B6      B5      B2      K       0E18    OSA     1E18    OTF
CL5     .   03  .               .       .       .
OSA     TO      B6      B5      B2      CL6     CL5     0E18    OSA     1E18
OTF     CL5     .   04  .               .       .       .       .
1SA     B4      B1      LP      0E18    OSA     1E18    OTF     CL5     .   04
```

526   CL5 and test, zero side.
```
1SA     TO      B6      B5      B3      0E18    OSA     1E18    1TF     CL5
.   01  CL6-    .   02  KTRS    K-      .   04  TOA     TO      .       .
1SA     TO      B4      B1      CL6     K       LP      0E18    OSA     1E18
1TF     CL5     .   01  KA      .   04  TOA     TO      .       .       .
1SA     TO      B6      B5      B3      B2      CL6     K       LP      0E18
OSA     1E18    1TF     CL5     .   02  LP      .   01  KA      K       .   03
BL5     B3      .   04  TOA     TO      .       .
1SA     TO      B6      B5      B3      B2      B1      CL6     CL5     K
MC      0E18    BSC     CL5     1E18    1TF     CL5     .   02  CL5     .   01
```

```
        KA        K          .    04  TOA    TO         .         .        .         .        .
        1SA       TO         B4        B3        0E18    OSA       1E18     1TF       CL5       .    02
        KTRS      .    01  CL6-   .    04  TOA    TO         .         .        .         .
        1SA       TO         B6        B5        B1       CL6       K        0E18      OSA       1E18
        1TF       CL5        .    02  B3-    .    01  KA     K          .    04  TOA    TO

527     1SA       TO         B6        B5        B3       B1        CL6      K         LP        0E18
        OSA       1E18       1TF       CL5       .    03  BL5       .    01  KA        K         .    02
        LP        .    04  TOA    TO         .         .         .        .         .
        1SA       TO         B4        B2        0E18    OSA       1E18     1TF       CL5       .    03
        KTRS      .    01  CL6-   .    04  TOA    TO         .         .        .
        1SA       TO         B4        B1        LP       0E18      OSA      1E18      1TF       CL5
        .    04  TOA    .    01  CL6-   .         .         .        .         .        .

528     CL4 or test, one side.  Logic for one side CL4 is on boards 337, 338, 339.
        OSA       B5         CL5       K         0E18     1SA       1E18     1TF       CL4       .    01
        1SA       B2         B1        CL4       0E18     1SA       1E18     1TF       CL4       .    01
        OSA       B2         B1        CL5       K        0E18      1SA      1E18      1TF       CL4
        .    02  .          .         .         .        .         .        .         .        .
        1SA       B5         CL4       0E18      1SA      1E18      1TF      CL4       .    02  .
        OSA       X0         0E18      1SA       1E18     1TF       CL4      .    03  .         .
        1SA       CL4        K         0E18      1SA      1E18      1TF      CL4       .    03  .

529     CL4 and test, one side.
        1SA       B5         B2        B4        CL4      0E18      1SA      1E18      0TF       CL4
        .    01  B5         .    03  KA-    K-        .    02  B2     .         .
        1SA       B5         B1        CL4       0E18     1SA       1E18     0TF       CL4       .    02
        B1        .    01  B5         .    03  KA-    K-        .         .        .         .
        1SA       CL5        CL4       0E18      1SA      1E18      0TF      CL4       .    02  CL5
        .    03  KA-    K-         .         .        .         .        .         .
        1SA       CL2        IP        0E18      BSC      CL4       1E18     0TF       CL4       .    02
        CL4-      .    03  KA-    K-         .         .        .         .        .
        1SA       B5         CL4       K         X0       0E18      1SA      1E18      0TF       CL4
        .    02  KA         .    03  X0         .         .        .         .        .
        1SA       B5         B2        B1        CL5      CL4       0E18     1SA       1E18      0TF
        CL4       .    03  KA-    .         .         .        .         .        .

530     CL4 or test, zero side.  Logic for zero side CL4 is on boards 337, 339.
        OSA       CL4        CL2       IP        K        0E18      OSA      1E18      0TF       CL4
        .    01  .          .         .         .        .         .        .         .
        1SA       B3         B2        B1        CL5      CL3       0E18     OSA       1E18      0TF
        CL4       .    01  .          .         .        .         .        .         .
        OSA       B3         B2        B1        CL5      CL4       CL3      K         0E18      OSA
        1E18      0TF        CL4       .    02  .         .        .         .        .
        1SA       CL2        IP        0E18      OSA      1E18      0TF      CL4       .    02  .
        OSA       CL4        0E18      OSA       1E18     0TF       CL4      .    03  .    02  .
        1SA       K          X0        0E18      OSA      1E18      0TF      CL4       .    03  .
```

Tape stops	Marker number												

531 — CL4 and test, zero side.

```
531   CL4 and test, zero side.
      1SA      B3       B2          B1       CL3      X0       OE18     OSA      1E18     1TF
      CL4      .     01 CL5-     03 KA-      K-       .
      1SA      B3       B2          B1       CL5      CL3      K        OE18     OSA      1E18
      1TF      CL4      .     01 KA       .     03 X0-      .        .        .
      1SA      CL2      X0          OE18     OSA      1E18     1TF      CL4      .     02 IP-
      .     01 CL5-     .     03 KA-      K-       .        .        .        1TF      .
      1SA      CL3      CL2         IP       X0       OE18     OSA      1E18     1TF      CL4
      .     02 CL3      .     01 CL5-     .     03 KA-      K-       .        .        .
      1SA      IP       X0          OE18     OSA      1E18     1TF      CL4      .     02 CL2-
      .     01 CL5-     .     03 KA-      K-       .        .        .        .
      1SA      B3       B2          B1       CL2      IP       X0       OE18     OSA      1E18
      1TF      CL4      .     02 BL7      .     01 CL5      .     03 KA-      K-       .
      1SA      CL2      IP          K        OE18     OSA      1E18     1TF      CL4      .     02
      KA       .     03 X0-      .        .        .        .        .        .        .

532   1SA      B3       B2          B1       CL3      X0       OE18     OSA      1E18     1TF
      CL4      .     03 KA-      .     01 CL5-     .        .        .        .        .

533   CL3 or test, one side.  Logic for one side CL3 is on board 314.
      OSA      B5       CL4         K        OE18     1SA      1E18     1TF      CL3      .     01
      1SA      CL3      OE18        1SA      1E18     1TF      CL3      .     01 .     02 .
      OSA      B4       S           OE18     1SA      1E18     1TF      CL3      .     02
      1SA      B6       B5          CL4      CL3      K        LP       OE18     1SA      1E18
      1TF      CL3      .     02    .        .        .        .        .        .
      OSA      B4       LP          OE18     1SA      1E18     1TF      CL3      .     03 .
      1SA      B6       B5          CL5      CL3      K        S        OE18     1SA      1E18
      1TF      CL3      .     03    .        .        .        .        .        .        .
      OSA      B4       CL5         LP       S        OE18     1SA      1E18     1TF      CL3
      .     04 .        .           .        .        .        .        .        .
      1SA      B6       B5          CL3      K        OE18     1SA      1E18     1TF      CL3
      .     04 .        .           .        .        .        .        .        .
      OSA      B4       CL5         OE18     1SA      1E18     1TF      CL3      .     05 .
      1SA      B6       B5          CL3      K        LP       S        OE18     1SA      1E18
      1TF      CL3      .     05    .        .        .        .        .        .

534   OSA      B5       B2          B1       XC       OE18     1SA      1E18     1TF      CL3
      .     06 .        .           .        .        .        .        .        .
      1SA      B6       B3          CL3      K        OE18     1SA      1E18     1TF      CL3
      .     06 .        .           .        .        .        .        .        .
```

```
535   CL3 and test, one side.
      1SA      B6      B3         CL4      CL3      0E18     1SA      1E18     0TF      CL3
      .     01 CL4     .       06 KA-      K-       .        .        .        .        .
      1SA      B5      B4         B2       B1       CL3      XC       0E18     1SA      1E18
      0TF      CL3     .       01 KB5      .        CL3      LP       0E18     1SA      1E18
      1SA      B6      B5         B3       CL3      K        LP       0E18     1SA      1E18
      0TF      CL3     .       02 CL5-     .     04 LP       .     05 S-       .     06 TRC
      B5       .                 .                 .        .        .        .        .
      1SA      B6      B5         B3       CL5      CL3      K        LP       S        0E18
      1SA      1E18    0TF        CL3      .     02 S        .     03 LP       .     05 CL5
      .     06 TRC     B5         .        .        .        .        .        .        .
      ────────────────────────────────────────────────────────────────────────────────
      1SA      B6      B5         B3       CL5      CL3      K        0E18     1SA      1E18
      0TF      CL3     .       02 LP-      .     03 S-       .     04 CL5      .     06 TRC
      B5       .        .          .        .        .        .        .        .        .
      1SA      B6      B5         B3       CL3      K        S        0E18     1SA      1E18
      0TF      CL3     .       03 CL5-     .     04 S        .     05 LP-      .     06 TRC
      B5       .        .          .        .        .        .        .        .        .

536   1SA      B4      B2         B1       CL4      CL3      LP       XC       S        0E18
      1SA      1E18    0TF        CL3      .     05 KTRS     .     01 CL4      .        .
      1SA      B6      B3         CL4      CL3      0E18     1SA      1E18     0TF      CL3
      .     06 KA-      .       01 CL4      .        .        .        .        .        .
      1SA      B6      B3         CL5      CL3      K        LP       XC       0E18     1SA
      1E18     0TF     CL3        .     06 XC        .     01 KB5     KB       K        .
      1SA      B4      B3         CL3      K        0E18     1SA      1E18     0TF      CL3
      .     06 TRC      .       01 KB5     KB       K        .        .        .        .
      1SA      B6      B2         B1       CL5      CL3      K        LP       0E18     1SA
      1E18     0TF     CL3        .     06 BL3      .     01 KB5     KB       K        .

537   CL3 or test, zero side.  Logic for zero side CL3 is on board 314.
      0SA      CL3     K          0E18     0SA      1E18     0TF      CL3      .     01 .
      1SA      T0      CL4        0E18     0SA      1E18     0TF      CL3      .     01 .
      0SA      B5      CL3        0E18     0SA      1E18     0TF      CL3      .     02 .
      1SA      T0      B6         B3       B2       B1       K        0E18     0SA      1E18
      0TF      CL3     .       02 .         .        .        .        .        .        .
      0SA      T0      B6         B3       B2       B1       CL4      CL3      0E18     0SA
      1E18     0TF     CL3        .     03 .         .        .        .     03 .        .
      1SA      B5      0E18       0SA      1E18     0TF      CL3      .     03 .         .
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Tape   Marker
stops   number

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538   CL3 and test, zero side.
      1SA    TO         B6      B3       B2     B1     OE18    OSA     1E18    1TF
      CL3    .      01  CL4-    .     02  KA-    K-      .   03 TOA     TO      .
      1SA    TO         B5      CL4      K      OE18   OSA     1E18    1TF     CL3
      .   01 KA         .    03 TOA      TO      .      .       .       .       .
      1SA    TO         B6      B3       B2     B1     OE18    OSA     1E18    1TF
      CL3    .      02  KA-     .     01  CL4-   .    03 TOA    TO      .       .
      1SA    TO         B5      B3       B2     B1     CL4     K       OE18    OSA
      1E18   1TF        CL3     .     02  TRC    .   01 KA     K        .   03 TOA
      TO     .          .       .
      1SA    TO         B6      CL4      K      OE18   OSA     1E18    1TF     CL3
      .   02 BLO        .    01 KA       K       .   03 TOA    TO      .       .
      1SA    TO         B5      OE18     OSA    1E18   1TF     CL3      .   03 TOA
      .   01 CL4-       .       .        .      .      .       .        .      .

539   CL2 or test, one side.  Logic for one side CL2 is on boards 230, 233.
      OSA    CL3    K       OE18    1SA     1E18   1TF     CL2      .   01  .
      1SA    CL2    OE18    1SA     1E18    1TF    CL2      .    01 .        .
      OSA    TO     AK      CL7     IP      03     02      1E18    1SA      1E18
      1TF    CL2    .    02 .       .       .      .        .      .        .
      1SA    CL2    D       K       04      OE18   1SA     1E18    1TF      CL2
      .   02 .      .       .       .       .      .        .      .        .
      OSA    TO     AK      CL7     04      OE18   1SA     1E18    1TF      CL2
      .   03 .      .       .       .       .      .        .      .        .
      1SA    CL2    D       IP      K       03     02      OE18    1SA      1E18
      1TF    CL2    .    03 .       .       .      .        .      .        .

540   CL2 and test, one side.
      1SA    CL3    CL2     D       03      02     OE18    1SA     1E18     OTF
      CL2    .   01 CL3     .    02 KIOC    KIO    K-       .   03 KIOC     KIO
      K-     .      .       .       .       .      .        .      .        .
      1SA    TO     AK      CL7     CL2     IP     K        04     OE18     1SA
      1E18   OTF    CL2     .    01 KA      .      .        .      .        .
      1SA    AK     CL7     CL3     CL2     04     OE18     1SA    1E18     OTF
      CL2    .   02 KIOC    .    01 CL3     .      OE18     1SA    1E18     OTF
      1SA    CL2    D       IP     K        04     OE18     1SA    1E18     OTF
      CL2    .   02 IPO     IP     .     01 KA     K         .      .       .
      1SA    TO     CL2     D      K        03     02       OE18    1SA    1E18
      OTF    CL2    .    02 IPO    TO       .   01 KA       K        .   03 TOA
      TO     .      .       .
      1SA    AK     CL7     CL3    CL2      IP     03       02      OE18    1SA
      1E18   OTF    CL2     .   03 KIOC     .   01 CL3      .        .       .
      1SA    TO     CL2     D      IP       K      03       02      OE18    1SA
      1E18   OTF    CL2     .   03 TOA      .   01 KA       K        .       .
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541   1SA      CL2           D        IP          K        04        OE18      1SA      1E18      OTF
      CL2      .      03 OL4          .     01 KA        K         .      02 IPO      IP        .

542   CL2 or test, zero side.  Logic for zero side CL2 is on boards 233, 234.
      OSA      CL2           K        OE18        OSA      1E18      OTF       CL2      .      01 .
      1SA      CL3           OE18     OSA         1E18     OTF       CL2       .     01
      OSA      AK            CL2      D           04       RC        TP        OE18     OSA      1E18
      OTF      CL2           .     02 .           .        .         .         .        .        .
      1SA      E             K        OE18        OSA      1E18      OTF       CL2      .      02 .
      OSA      AK            CL2      D           QC       TP        OE18      OSA      1E18     OTF
      CL2      .      03 .           .           .        .         .         .        .        .
      1SA      E             K        04          OE18     OSA       1E18      OTF      CL2      .   03
      OSA      CL2           E        OE18        OSA      1E18      OTF       CL2      .      04 .
      1SA      AK            D        K           QC       RC        TP        OE18     OSA      1E18
      OTF      CL2           .     04 .           .        .         .         .        .        .

543   CL2 and test, zero side.
      1SA      AK            D        OE18        OSA      1E18      1TF       CL2      .      01 CL3-
      .     02 KA-          K-       .      04 KSU0      KED2      K-        .        .        .
      1SA      CL3           E        K           QC       RC        TP        OE18     OSA      1E18
      1TF      CL2           .     01 KA          .        .         .         .        .        .
      1SA      E             OE18     OSA         1E18     1TF       CL2       .      02 KA-      .   01
      CL3-     .             .        .
      1SA      CL3           E        K           RC       OE18   03 OSA       1E18     1TF      CL2
      .     02 RC            .     01 KA          K        .      03 04A-      04-      .        .        .
      1SA      CL3           E        K           04       QC        OE18      OSA      1E18     1TF
      CL2      .      02 04A          .     01 KA        K         .      03 QC        .        .        .
      1SA      CL3           E        K           TP       OE18      OSA       1E18     1TF      CL2
      .     02 TPA           .     01 KA          K        .         .         .        .        .
      1SA      E             04       OE18        OSA      1E18      1TF       CL2      .      03 KA-
      .     01 CL3-          .        .           .        .         .         .        .        .
      1SA      CL3           E        K           RC       OE18      OSA       1E18     1TF      CL2
      .     03 04A-          .     01 KA          K        .      02 RC        .        .        .

544   1SA      CL3           E        K           04       TP        OE18      OSA      1E18     1TF
      CL2      .      03 TPA          .     01 KA        K         .         .        .        .
      1SA      E             QC       RC          TP       OE18      OSA       1E18     1TF      CL2
      .     04 KSU0          .     01 CL3-        .        .         .         .        .        .

545   CP5 or test, one side.  Logic for one side CP5 is on boards 213, 214, 404.
      OSA      B4            CL6      K           TS0      OE18      1SA       1E18     1TF      CP5
      .     01 .
      1SA      CP5           FS       OE18        1SA      1E18      1TF       CP5      .      01 .
      OSA      TX            AK       CP4         CP3      CP2       0B4       0B2      05       E1
      E3       OE18          1SA      1E18        1TF      CP5       .      02 .        E2       0E18
      1SA      B2            CP5      D           E        K         0B3       E2       OE18     1SA
      1E18     1TF           CP5      .      02 .           .         .         .        .        .
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Tape stops	Marker number	

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546    CP5 and test, one side.
       1SA    B2     CL6    CP5    D         E         FS        OB3    E2        OE18
       1SA    1E18   OTF    CP5    .  01     CL6    .  02     OCT    K-        .
       1SA    TX     AK     B4     CP5       CP4       CP3       CP2    OB4       OB2
       05     TSO    E6     OE18   1SA       1E18      OTF       CP5    .  01     KFST
       1SA    B2     D      E      FS        K         OB3       E2     OE18      BSC
       CP5    1E18   OTF    CP5    .  02     CP5-   .  01     KFST   KT32      5
       1SA    B2     CP5    CP4    CP3       CP2       D         E      FS        K
       OB3    E6     OE18   1SA    1E18      OTF       CP5    .  02     CPL7   .  01
       KFST   KT32   K      .      .         .         .         .
       1SA    TX     AK     B4     CL6       CP5       OB4       OB2    05        TSO
       E2     OE18   1SA    1E18   OTF       CP5    .  02     OCT    .         .

547    CP5 or test, zero side.  Logic for zero side CP5 is on board 213.
       OSA    B4     CP5    K      TSO       OE18      OSA       1E18   OTF       CP5
       .  01  .      .      .      .         .         .         .      .
       1SA    CL6    FS     OE18   OSA       1E18      OTF       CP5    :  01     .
       OSA    CL7    CP5    OE18   OSA       1E18      OTF       CP5    .  02     .
       1SA    K      OE18   OSA    1E18      OTF       CP5    .  02     .      .

548    CP5 and test, zero side.
       1SA    FS     OE18   OSA    1E18      1TF       CP5    .  01     CL6-   .  02
       CRS    K-     .      .      .         .         .         .
       1SA    B5     CL7    CL6    K         TSO       OE18      OSA    1E18      1TF
       CP5    .  01  KFST   .  02  CRS       CL7       .         .      .

549    CP4 or test, one side.  Logic for one side CP4 is on boards 321, 403.
       OSA    B4     CL5    K      TSO       OE18      1SA       1E18   1TF       CP4
       .  01  .      .      .      .         .         .         .
       1SA    CP4    FS     OE18   1SA       1E18      1TF       CP4    .  01     .
       OSA    TX     AK     CP3    CP2       OB4       OB2       05     E3        OE18
       1SA    1E18   1TF    CP4    .  02     .         .         .      .
       1SA    B2     CP4    D      E         K         OB3       E1     E2        E4
       OE18   1SA    1E18   1TF    CP4    .  02     .         .      .

550    CP4 and test, one side.
       1SA    B2     CL5    CP4    D         E         FS        OB3    E1        E2
       E4     OE18   1SA    1E18   OTF       CP4    .  01     CL5    .  02     OCT
       K-     .      .      .      .         .         .
       1SA    TX     AK     B4     CP4       CP3       CP2       OB4    OB2       05
       TSO    E3     OE18   1SA    1E18      OTF       CP4    .  01     KFST
       1SA    B2     CP4    CP3    CP2       D         E         FS     K         OB3
       E3     OE18   1SA    1E18   OTF       CP4    .  02     CPL3   .  01     KFST
       KT32   K      .      .      .         .         .
       1SA    TX     AK     B4     CL5       CP4       OB4       OB2    05        TSO
       E1     E2     E4     OE18   1SA       1E18      OTF       CP4    .  02     OCT
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551   CP4 or test, zero side.  Logic for zero side CP4 is on boards 320, 321, 404.
      OSA     B4        CP4     K       TSO     0E18    OSA     1E18    OTF             CP4
      .       01        .       .       .       .       .       .       .       01      .
      1SA     CL5       FS      0E18    OSA     1E18    OTF     CP4             .       01      .
      OSA     B2        CL7     CP4     D       E       0B3     0E18    OSA             1E18
      OTF     CP4       .       02      .
      1SA     TX        AK      CP3     CP2     K       0B4     0B2     05              E6
      0E18    OSA       1E18    OTF     CP4     .       02      .       .       .       .
      OSA     TX        AK      CP4     CP3     CP2     0B4     0B2     05              E1
      E3      0E18      OSA     1E18    OTF     CP4     .       03      .       .       .
      1SA     B2        CL7     D       E       K       0B3     E2      0E18            OSA
      1E18    OTF       CP4     .       03      .       .       .       .       .       .

552   CP4 and test, zero side.
      1SA     B2        D       E       FS      0B3     E2      0E18    OSA             1E18
      1TF     CP4       .       01      CL5-    .       02      CRS     K-      .       03      OCT     K-
      1SA     TX        AK      B4      CL7     CL5     CP3     CP2     K               0B4
      0B2     05        TSO     E6      0E18    OSA     1E18    1TF     CP4     .               01
      KFST    .         02      CRS     CL7     .       .       .       .       .
      1SA     TX        AK      B4      CL7     CP3     CP2     0B4     0B2     05
      TSO     E6        0E18    OSA     1E18    1TF     CP4     .       02      CRS     .
      1SA     B2        CL7     CL5     CP3     CP2     D       E       FS      K
      0B3     E6        0E18    OSA     1E18    1TF     CP4     .       03      CPL7    .       01
      KFST    KT32      K       .       02      CRS     CL7     .       .       .
      1SA     TX        AK      B4      CL7     K       0B4     0B2     05              TSO
      E2      0E18      OSA     1E18    1TF     CP4     .       03      OCT     .       02      CRS
      CL7     .         .       .       .       .       .       .       .       .

553   Flip-flop logic tests.  Flip-flop logic tests on logic for AC and AK flip-flops.  AC or test,
      one side.  Logic for one side AC is on boards 237, 238, 239.
      OSA     TX        E       K       05      04      0E18    1SA     1E18    1TF
      AC      .         01      .       .       .       .       .       .       .       .
      1SA     AC        OFL0    06      0E18    1SA     1E18    1TF     AC      .       01
      OSA     TX        E       K       0E18    1SA     1E18    1TF     AC      .       02
      1SA     AC        OFL0    06      05      04      0E18    1SA     1E18    1TF
      AC      .         02      .       .       .       .       .       .       .       .
      OSA     TX        E       K       06      05      04      03      02      0E18
      1SA     1E18      1TF     AC      .       03      .       .       .       .
      1SA     AC        OFL0    0E18    1SA     1E18    1TF     AC      .       03      .
      OSA     TX        AK      D4      0B4     0B2     05      04      02      0E18
      1SA     1E18      1TF     AC      .       04      .       .       .       .
      1SA     T0        AC      B2      CL7     D       E       K       0B3     03
      0E18    1SA       1E18    1TF     AC      .       04      .       .       .
      OSA     TX        AK      D4      0B4     0B2     05      04      03      0E18
      1SA     1E18      1TF     AC      .       05      .       .       .       .       .
```

Tape stops	Marker number													
	554	1SA	TO	AC		B2	CL7	D	05	E	K		0B3	02
		0E18	1SA	1E18		1TF	AC	.		.	.		.	.
		0SA	TX	AK		0B4	0B2	05		04	0E18		1SA	1E18
		1TF	AC	.	06	.	.	.		.	.		.	.
		1SA	TO	AC		B2	CL7	D4		D	E		K	0B3
		03	02	0E18		1SA	1E18	1TF	AC	.	06		.	.
		0SA	TX	AK		D4	0B4	0B2	05	0E18			1SA	1E18
		1TF	AC	.	07	.	.			.	.		.	.
		1SA	TO	AC		B2	CL7	D		E	K	07	0B3	04
		03	02	0E18		1SA	1E18	1TF	AC	.			.	.
		0SA	TO	AK		B2	CL7	D4		0B3	0E18		1SA	1E18
		1TF	AC	.	08	.	.			.			.	.
		1SA	TX	AC		D	K	0B4		0B2	05		04	03
		02	0E18	1SA		1E18	1TF	AC	08	.	.		.	.
	555	AC and test, one side.												
		1SA	TO	AC		AK	CL7	E		0B4	0B2		0FLO	06
		04	03	02		0E18	1SA	1E18		0TF	AC	01	.	K06-
		.	02	K06-		E	.	.		.	.		.	.
		1SA	AC	0FLO		06	05	0E18		1SA	1E18		0TF	AC
		.	01	05		.	02	04X	0B4-	04-	.		.	.
		1SA	TX	AC		D	0FLO	06		04	0E18		1SA	1E18
		0TF	AC	.	01	TXB	.	02	04X	TXA	TX	.	08	KIOC
		KIO	K-	.		.								
		1SA	AC	D		06	04	0E18		1SA	1E18		0TF	AC
		.	01	0FLO-		.	02	0FLO-	.	08	KIOC	KIO	K-	.
		1SA	TO	AC		AK	CL7	E		0B4	0B2		0FLO	05
		04	03	02		0E18	1SA	1E18		0TF	AC	.	02	K06-
		1SA	TX	AC		D	0FLO	06		05	04		0E18	1SA
		1E18	0TF	AC		.	02	04X	.	08	KIOC	KIO	K-	.
	556	1SA	TO	AC		AK	CL7	E		0B4	0B2		0FLO	06
		05	04	03		02	0E18	1SA	1E18	0TF	AC		.	03
		0Y	.	02	K06-	E	.	.		.	.		.	03
		1SA	TX	AC		0FLO	0E18	1SA	1E18	0TF	AC		.	03
		TXB	.	.		.	.	.		.			.	
		1SA	AC	0E18		1SA	1E18	0TF	AC	.	03	0FLO-	.	
		1SA	TO	AC		B2	CL7	D		E	K		0B3	03
		02	0E18	1SA		1E18	0TF	AC	.	04	02A	.	05	03
		.	06	D4-		.	07	04A-	04-	.	.		.	.
		1SA	TO	AC		B2	CL7	D		E	K	07	0B3	03
		02	0E18	1SA		1E18	0TF	AC	.	07	04A-	.	04	02A
		02	.	05	03	.	06	D4-		.	.		.	.
		1SA	TO	TX		AC	AK	CL7		0B4	0B2		05	04
		03	02	0E18		1SA	1E18	0TF	AC	.	07	0CT	.	

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557   1SA      TX       AC       AK       CL7      0B4      0B2      05       04       03
      02       0E18     1SA      1E18     OTF      AC       .     08 KIOC    .        .
      1SA      TX       AC       D        K        0B4      0B2      05       03       02
      0E18     1SA      1E18     OTF      AC       .     08 04A-    .        .        .
      1SA      TO       TX       AC       D        K        0B4      0B2      05       04
      03       02       0E18     1SA      1E18     OTF      AC       .     08 TOB      .

558   AC or test, zero side.  Logic for zero side AC is on boards 237, 238, 239.
      OSA      AC       B6       B4       B2       B1       K        TP       IX       0E18
      OSA      1E18     OTF      AC       .     01 .        .        .        .        .
      1SA      B3       D        E        05       04       03       02       0E18     OSA
      1E18     OTF      AC       .     01 .        .        .        .        .        .
      OSA      AC       B3       E        K        06       05       04       03       02
      0E18     OSA      1E18     OTF      AC       .     02 .        .        .        .
      1SA      TX       B6       B4       B2       B1       D        TP       IX       0E18
      OSA      1E18     OTF      AC       .     02 .        .        .        .        .
      OSA      TO       AC       C7       E        K        05       04       03       02
      0E18     OSA      1E18     OTF      AC       .     03 .        .        .        .
      1SA      TX       06       TP       0E18     OSA      1E18     OTF      AC       .     03
      OSA      TX       AC       B6       B4       B1       IX       0E18     OSA      1E18
      OTF      AC       .     04 .        .        .        .        .        .        .

559   1SA      B3       B2       D        E        K        05       04       03       02
      0E18     OSA      1E18     OTF      AC       .     04 .        .        .        .

560   AC and test, zero side.
      1SA      B3       E        05       04       03       02       0E18     OSA      1E18
      1TF      AC       .     01 DA-      .        .        K        05       04       03
      1SA      TO       B3       C7       D        E        K        05       04       03
      02       0E18     OSA      1E18     1TF      AC       .     01 KTP      .     04 TXF
      B2-      .        .        .        .        .        .        .        .        .
      1SA      TO       TX       B6       B4       B2       B1       C7       D        E
      K        05       04       03       02       IX       0E18     OSA      1E18     1TF
      AC       .     02 .        OY       .     01 KTP      K        .     04 TXF      TX
      1SA      TX       B6       B4       B2       B1       D        TP       0E18     OSA
      1E18     1TF      AC       .     02 IX-      .     01 KTP      TP       .     03 0X0
      0X       06-      .     04 TXF      TX       .        .        .        .     02 QT1
      1SA      B3       IX       0E18     OSA      1E18     1TF      AC       .     02 QT1
      .     01 DA-      D-       .        .        05       04       03       02       0E18     OSA
      1SA      B3       E        K        05       04       03       02       0E18     OSA
      1E18     1TF      AC       .     03 0X0      0X       .        .        .        .
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Tape stops	Marker number														
	561	1SA	TX	B6	B4	B2	B1	C7		D		06		TP	
		IX	OE18	OSA	1E18	1TF	AC	.	03	OX0		C7		.	01
		KTP	TP	.	02	OY	06	.	04	TXF		TX		.	.
		1SA	TO	TX	B6	B4	B2	B1		D		06		TP	
		IX	OE18	OSA	1E18	1TF	AC	.	03	OX0		TO		.	01
		KTP	TP	.	02	OY	06	.	04	TXF		TX		.	.
		1SA	AC	B6	B4	B2	B1		D		OFL0	06		TP	
		IX	OE18	BSC	AC	1E18	1TF	AC		.	04	AC		.	01
		KTP	TP	.	02	OY	06	.	03	OX0		OX	TX-	.	
		1SA	TO	B3	C7	D	E	K		05		04		03	
		02	OE18	OSA	1E18	1TF	AC	.	04	TXF		.	01	KTP	
		K	.	.	.	.	.	.		.		.		.	
		1SA	B3	B2	E	K		05		04		03		02	OE18
		OSA	1E18	1TF	AC	.	04	DA-		.		.		.	.
	562	AK or test, one side. Logic for one side AK is on boards 224, 230.													
		OSA	AC	AX	E	K		MN		OE18	1SA	1E18		1TF	
		AK	.	01	.	.	.	.		.		.		.	.
		1SA	TO	TX	AK	B4	DC		06		03		02		PS	
		OE18	1SA	1E18	1TF	AK	.	01		.		.		.	.
		OSA	AC	E	K	MN	02			OE18	1SA	1E18		1TF	
		AK	.	02	.	.	.	.		.		.		.	.
		1SA	TO	TX	AK	AX	B4		DC		06		03		PS	
		OE18	1SA	1E18	1TF	AK	.	02		.		.		.	.
		OSA	D	E	K	LX	MN		06		05		03		OE18	
		1SA	1E18	1TF	AK	.	03		B6		04		02		PS	OE18
		1SA	TO	TX	AK	AX		B6		04		02		PS	OE18	
		1SA	1E18	1TF	AK	.	03									
		OSA	AC	D	E	K	LX		06		05		03		TSO	
		OE18	1SA	1E18	1TF	AK	.	04		.		.		.	.
		1SA	TO	TX	AK	MN	04			02		PS		OE18	1SA	
		1E18	1TF	AK	.	04	.		.		.		.		.	.
	563	OSA	TX	B6	D	E	K	LX		MN		06		05	
		03	TSO	OE18	1SA	1E18	1TF	AK		.	05	.		.	.
		1SA	AK	AX	04	PS	OE18	1SA		1E18		1TF		AK	
		.	05	.	.	.	.	.		.		.		.	.
		OSA	TX	AX	D	E	K		LX		06		05		03	
		OE18	1SA	1E18	1TF	AK	.	06		.		.		.	.
		1SA	AK	MN	04	TSO	PS		OE18		1SA		1E18		1TF	
		AK	.	06	.	.	.	.		.		.		.	.
		OSA	E	K	MN	05	03		02		OE18	1SA	1E18			
		1TF	AK	.	07	.	.	.		.		.		.	.

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                                                                                    07
       1SA    TX     AK     B4          06     04     TP     PS     0E18   1SA
       1E18   1TF    AK            07    06     05     04     0E18   1SA    1E18
       0SA    TO     E      K            06     05     04     0E18   1SA    1E18
       1TF    AK             08    03    02     PS     0E18   1SA    1E18   1TF
       1SA    AK     B4      ·     03    02     PS     0E18   1SA    1E18   1TF
       AK             08     ·

564    0SA    B6     B3     B2     E      K      06     05     0E18   1SA
       1E18   1TF    AK            09     ·      ·      ·      ·      ·
       1SA    AK     B4     B1     04     03     02     PS     0E18   1SA
       1E18   1TF    AK            09     ·      ·      ·      ·      ·
       0SA    E      LC     0B3    05     TP     0E18   1SA    1E18   1TF
       AK             10     ·     ·      ·
       1SA    AK     D      K      OFLO   PE     PS     0E18   1SA    1E18
       1TF    AK             10     ·     ·      ·
       0SA    TX     B4     DC     E      K      TSO    0E18   1SA    1E18
       1TF    AK             11     ·     ·      ·
       1SA    AC     AK     D      05     PS     0E18   1SA    1E18   1TF
       AK             11     ·
       0SA    TX     B1     DC     OFLO   PE     PS     0E18   1SA    1E18
       1TF    AK             12     ·     ·      ·
       1SA    AC     AK     B6     B3     B2     E      LC     LX     0B3
       05     0E18   1SA    1E18   1TF    AK            12     ·      ·      ·

565    0SA    TO     E      K      06     05     02     0E18   1SA    1E18
       1TF    AK             13     ·     ·      ·      ·      ·      ·
       1SA    AK     B4      03    PS     0E18   1SA    1E18   1TF    AK
       ·      13      ·      ·     ·      ·      ·      ·      ·      ·

566    AK and test, one side.
       1SA    TO     TX     AK     AX     B4     B1     DC     D      OFLO
       06     04     03     02     PE     PS     0E18   1SA          1E18   0TF
       AK            01            MAX3          02  02A   02            09  ORB    K065
       06            10  KED2      K-         11  KT32   B4            12  *TO    PS
       1SA    TO     TX     AK     B4     DC     D             06      01  02-         02
       TP     PS     0E18   1SA    1E18   0TF    AK            01  02-      ·         12
       MAX2   AX-           07  OF     03A    03            11  KT32   B4         ·   12
       TD     PS      ·      ·
       1SA    TO     TX     AC     AK     B6     B3     B2     D      E
       LC     0B3    05     02     PS     0E18   1SA    1E18   0TF    AK
       ·      01  0A      ·    11  E      ·      12  *TD    PS     ·      ·
       1SA    AK     B4     DC     D      OFLO   06            03     02         PE
       PS     0E18   1SA    1E18   0TF    AK            01  TOX-      ·      08  ORB
       K065   06      ·    10  KED2   K-     ·     11  KT32   B4     ·      12  *TD
       PS      ·      ·      ·      ·      ·      ·      ·      ·      ·
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Tape stops	Marker number															

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567   1SA     TO          TX       AK        B4        DC        D          MN        OFLO      06
      03      PE          PS       OE18      1SA       1E18      OTF        AK        .       02 MAX2
      .    10 KED2        K-       .      11 KT32      B4        .       12 *TD        PS        .
      1SA     TO          TX       AK        AX        B4        B1         DC        D         OFLO
      06      04          03       02        PE        PS        OE18       1SA       1E18      OTF
      AK      .        02 02A      .      01 MAX3      AX        .       09 ORB        K065      06
      .    10 KED2        K-       .      11 KT32      B4        .       12 *TD        PS        .
      1SA     TO          TX       AC        AK        AX        B6         D         E         LC
      LX      OB3         05       PS        OE18      1SA       1E18       OTF       AK        .    02
      0A      .        11 E        .      12 *TD       PS        .
      1SA     AK          AX       B4        DC        D         OFLO       06        03        PE
      PS      OE18        1SA      1E18      OTF       AK        .       03 TOX-       .      10 KED2
      K-      .        11 KT32     B4        .      12 *TD       PS         .      13 OEL        K065
      06      .           .        .         .         .         .          .         .         .

568   1SA     TO          TX       AK        AX        B6        MN         04        02        TSO
      PS      OE18        1SA      1E18      OTF       AK        .       03 MAX2       .      04 MAX1
      AX      .        06 MAX1     AX        .      12 *TD       PS         .
      1SA     TO          TX       AK        AX        B6        04         TP        PS        OE18
      1SA     1E18        OTF      AK        .      03 02-       D-         .      05 T32        B6        .  07
      OF      K06-        06-      .      11 KD2       04        .       12 *TD       PS         .
      1SA     AK          AX       B6        02        PS        OE18       1SA       1E18
      OTF     AK          .     03 TOX-      .      05 T32       B6         .      11 KD2        D-        .  11
      .    12 *TD         PS       .         .         .
      1SA     TO          TX       AK        AX        B6        MN         04        02        TSO
      PS      OE18        1SA      1E18      OTF       AK        .       04 MAX1       .      03 MAX2
      MN      .        06 MAX1     AX        .      12 *TD       PS         .
      1SA     TO          TX       AK        MN        04        PS         OE18      1SA       1E18
      OTF     AK          .     04 02-       .      06 TSO-      .       11 KD2        D-        .  12
      *TD     PS          .        .         .         .

569   1SA     AK          B4       B1        MN        04        02         PS        OE18      1SA
      1E18    OTF         AK       .      04 TOX-      .      06 TSO-       .      09 ORB        032-
      03-     .        12 *TD      PS        .
      1SA     TO          AK       B4        B1        MN        04         02        PS        OE18
      1SA     1E18        OTF      AK        .      05 MAX2      04      04 TOX-       TX-       .  06
      TSO-    .        09 ORB      032-      03-    12 *TD       PS         .
      1SA     TO          AK       AX        B6        04        02         PS        OE18      1SA
      1E18    OTF         AK       .      05 T32       .      03 TOX-       TX-       .      11 KD2
      D-      .        12 *TD      PS        .
      1SA     TO          AK       AX        B4        B1        04         02        TSO       PS
      OE18    1SA         1E18     OTF       AK        .      06 MAX1       .      03 TOX-       TX-
      .    05 T32         TSO      .      09 ORB       032-      03-     12 *TD        PS        05
      1SA     AK          B6       B3        B2        E         LC         MN        OB3       05
      TSO     PS          OE18     1SA       1E18      OTF       AK         .      06 OTL        .  12
      *TD     PS          .        .         .         .         .          .         .         .
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Ref	1	2	3	4	5	6	7	8	9	10
570	1SA	TO	TX	AK	B4	B1	LX	MN	04	02
	TSO	PS	OE18	1SA	1E18	OTF	AK	.	06 LX	. 09
	ORB	032-	03-	.	12 *TD	PS	.	.	TP	PS
	1SA	TX	AK	B4	MN	06	04	TSO	TP	PS
	OE18	1SA	1E18	OTF	AK	.	07 MNA	.	06 OTL	KO65
	06	.	*TD	PS						
	1SA	TX	AC	AK	B6	D	E	LC	LX	OB3
	05	PS	OE18	1SA	1E18	OTF	AK	.	07 OF	. 11
	E	.	12 *TD	PS	.	.	.	.	.	.
	1SA	TO	TX	AK	B4	DC	D	06	04	02
	TP	PS	OE18	1SA	1E18	OTF	AK	.	07 02A	. 01
	OA	03A-	03-	.	11 KT32	B4	.	12 *TD	PS	.
	1SA	AK	AX	B4	06	04	TP	PS	OE18	1SA
	1E18	OTF	AK	.	07 TXA-	.	12 *TD	PS	.	.
571	1SA	AK	D	E	LC	OB3	05	03	02	PS
	OE18	1SA	1E18	OTF	AK	.	08 ORB	KO65	.	11 E
	.	12 *TD	PS	.	.	.	.	.	.	.
	1SA	AK	AX	B4	PS	OE18	1SA	1E18	OTF	AK
	.	08 ORB	032-	.	12 *TD	PS	.	13 OEL	03A-	03-
	1SA	AK	B6	B4	B3	B2	MN	04	03	02
	TSO	PS	OE18	1SA	1E18	OTF	AK	.	08 04A	. 06
	OTL	03A	03	.	12 *TD	PS	.	13 OEL	02	.
	1SA	TO	TX	AK	B4	B1	DC	D	OFLO	03
	02	PE	PS	OE18	1SA	1E18	OTF	AK	.	08 TOB
	.	01 OA	K06-	06-	.	09 04A-	04-	.	10 KED2	K-
	.	11 KT32	B4	.	12 *TD	PS				
	1SA	AC	AK	B4	B1	E	LC	LX	OB3	05
	04	PS	OE18	1SA	1E18	OTF	AK	.	09 ORB	. 12
	*TD	PS	.	.	.	.	.	.		

Tape stops	Marker number

```
572   1SA      TO       TX       AK          B4       B1       DC       D          OFLO        03
      02       PE       PS       OE18        1SA      1E18     OTF      AK         .      09   04A-
      .    01  OA       K06-     06-     12  *TD  08   TOB      TO       .      10  KED2        K-
      .    11  KT32     B4       .                PS       .        .          .           .
      1SA      TO       TX       AK          B6       B4       B1       DC         D           OFLO
      04       03       02       PE          PS       OE18     1SA      1E18       OTF         AK
      .    09  TOP      .    01  OA          K06-     06-      .    10  KED2       K-          .     11
      KT32     B4       .    12  *TD         PS       .        .        .          .           .
      1SA      TO       TX       AK          B4       B3       B2       DC         D           OFLO
      04       03       02       PE          PS       OE18     1SA      1E18       OTF         AK
      .    09  BL6      .    01  OA          K06-     06-      .    10  KED2       K-          .     11
      KT32     B4       .    12  *TD         PS       .        .        .          .           .
      1SA      AC       AK       B6          B3       B2       D        E          LX          OFLO
      03       02       PE       PS          OE18     1SA      1E18     OTF        AK          .     10
      KED2     .        .    08  ORB         K065     E        .    11  E          .       12  *TD
      PS       .        .                    .        .        .        .          .           .

573   1SA      TO       TX       AK          DC       D        K        LC         OB3         OFLO
      06       05       03       02          PE       PS       OE18     1SA        1E18        OTF
      AK       .    10  OLTP     .       01  OA       K06-     K        .      11  KD2         K
      .    11  KT32     K        .       12  *TD      PS       .                   .           .
      1SA      TO       TX       AK          DC       D        K        06         03          02
      PS       OE18     1SA      1E18        OTF      AK       .    10  ERR-       .       01  OA
      K06-     K        .    11  KD2         K        .    11  KT32     K          .       12  *TD
      PS       .        .                    .        .        .        .          .           .
      1SA      AC       AK       B6          LX       05       03       02         PS          OE18
      1SA      1E18     OTF      AK          .    11  KD2      .    08  ORB        K065        05
      .    12  *TD      PS       .                    .        .        .          .           .
      1SA      AC       AK       B6          B4       B3       B2       D          05          03
      02       PS       OE18     1SA         1E18     OTF      AK       .      11  KT32        .     08
      ORB      K065     05       .       12  *TD      PS       .        .          .           .

574   1SA      AK       B6       B3          B2       D        E        LC         LX          OB3
      05       PS       OE18     1SA         1E18     OTF      AK       .      13  OEL         .     11
      E        .    12  .        *TD         PS       .        .        .          .
      1SA      TO       TX       AK          AX       B4       B1       DC         04          03
      PS       OE18     1SA      1E18        OTF      AK       .    13  TOB        .       02  OA
      K06-     06-      .    09  ORB         032-     02-      .    12  *TD        PS          .
```

```
575   AK or test, zero side.  Logic for zero side AK is on boards 223, 224.
      OSA      AC       AK       E        K        OE18     OSA      1E18     OTF      AK
         01
      1SA      TX       AX       DC       D        MN       06       03       02       TSO
      OE18     OSA      1E18     OTF      AK          01
      OSA      AC       AK       AX       E        K        02       OE18     OSA      1E18
      OTF      AK          02
      1SA      TX       DC       D        MN       06       03       TSO      OE18     OSA
      1E18     OTF      AK          02
      OSA      AC       AK       D        E        K        TSO      OE18     OSA      1E18
      OTF      AK          03
      1SA      TX       AX       DC       MN       06       03       02       OE18     OSA
      1E18     OTF      AK          03
      OSA      AC       AK       AX       D        E        K        02       TSO      OE18
      OSA      1E18     OTF      AK          04

576   1SA      TX       DC       MN       06       03       OE18     OSA      1E18     OTF
      AK          04
      OSA      AK       AX       B6       D        E        K        LX       06       05
      03       02       TSO      OE18     OSA      1E18     OTF      AK          05
      1SA      TX       MN       04       OE18     OSA      1E18     OTF      AK          05
      OSA      AK       D        E        K        LX       MN       06       05       03       05
      02       OE18     OSA      1E18     OTF      AK          06
      1SA      TX       AX       04       TSO      OE18     OSA      1E18     OTF      AK
      OSA   06 AK       B5       B3       B2       E        K        06       05       OE18
      OSA      1E18     OTF      AK          07
      1SA      TX       B1       03       02       OE18     OSA      1E18     OTF      AK
         07
      OSA      TO       AK       D4       OB4      OB2      04       OE18     OSA      1E18
      OTF      AK          08
      1SA      DSP      D3       D2       D        E        K        OB3      OFLO     03
      02       PE       TP       OE18     OSA      1E18     OTF      AK          08

577   OSA      TX       AK       B1       DC       D        E        OE18     OSA      1E18
      OTF      AK          09
      1SA      AC       B6       B5       B3       B2       LX       05       OE18     OSA
      1E18     OTF      AK          09
      OSA      AK       DSP      D3       D2       OB3      OFLO     TP       OE18     OSA
      1E18     OTF      AK          10
      1SA      TO       D4       D        K        OB4      OB2      PE       OE18     OSA
      1E18     OTF      AK          10
      OSA      AK       DSP      D3       D2       OB3      PE       TP       OE18     OSA
      1E18     OTF      AK          11
      1SA      TO       D4       D        K        OB4      OB2      OFLO     OE18     OSA
      1E18     OTF      AK          11
```

Tape stops	Marker number

578   AK and test, zero side.

```
1SA    TX      B1         DC      MN        06      03       02      TS0     0E18
0SA    1E18    1TF        AK      .     01  MAX0    .    02  02A     02      .    03
MAX0   AX-     .      04  02A     02    .     07  ORB     K065    06      .    09
TXB    TX      .          .       .         .       .        .       .       .
1SA    TX      AX         DC      MN        06      03       TS0     0E18    0SA
1E18   1TF     AK         .   01  02-       .    02 MAX1     AX      .    03  02-
.   04 MAX1    AX         .   09  TXB       TX      .        .       .       .
1SA    TX      AX         B1      DC        D       MN       06      03      02
0E18   0SA     1E18       1TF     AK        .   01  TS0-     .   03  D       .    07
ORB    K065    06         .   10  KIO       K-      .    11  KIO     K-      .
1SA    TX      AK         DC      MN        06      03       TS0     0E18    0SA
1E18   1TF     AK         .   02  MAX1      .    01 02-      .   03  02-     .    04
MAX1   AX      .      09  TXB     TX        .       .        .       .
1SA    TX      B1         DC      MN        06      03       02      TS0     0E18
0SA    1E18    1TF        AK      .     02  02A     .    01  MAX0    AX-     .    03
MAX0   AX-     .      04  02A     02    .     07  ORB     K065    06      .    09
TXB    TX      .          .       .         .       .        .       .       .
```

579

```
1SA    TX      DC         D       MN        06      03       0E18    0SA     1E18
1TF    AK      .      02  TS0-    .     04  D       .    10  KIO     K-      .    11
KIO    K-      .          .       .         .       .
1SA    TX      B1         DC      MN        06      03       02      TS0     0E18
0SA    1E18    1TF        AK      .     03  MAX0    .    01  MAX0    AX-     .    02
02A    02      .      04  02A     02    .     07  ORB     K065    06      .    09
TXB    TX      .          .       .         .       .        .       .
1SA    TX      AX         DC      MN        06      03       TS0     0E18    0SA
1E18   1TF     AK         .   04  MAX1      .    01 02-      .   02  MAX1    AX
.   03 02-     .      09  TXB     TX        .       .        .       .
1SA    TX      B1         DC      MN        06      03       02      TS0     0E18
0SA    1E18    1TF        AK      .     04  02A     .    01  MAX0    AX-     .    02
02A    02      .      03  MAX0    AX-   .     07  ORB     K065    06      .    09
TXB    TX      .          .       .         .       .        .       .
1SA    TX      AC         B6      K         LX      MN       05      0E18    0SA
1E18   1TF     AK         .   04  0A        .    09 TXB      TX      .   10  KIO
D-     .   11  KIO        D-      .         .       .        .       .
```

580

```
1SA    TX      AX     04  0E18    0SA       1E18    1TF      AK      .   05
MAX1   .   06  TS0-   .   09  TXB TX        .        .       .       .
1SA    TX      B1         MN      04        02      0E18     0SA     1E18    1TF
AK     .   05  02A    .   07  ORB 032-      03-     .    09  TXB     TX
1SA    TX      B6         MN      04        0E18    0SA     1E18    1TF     AK
.   05 T32     .      09  TXB     TX        .        .       .       .
```

```
      1SA    TX       MN        04        TSO    0E18     0SA     1E18     1TF     AK
       .  06 MAX2      .     05 T32       TSO      .    09 TSB     TX       .       .
      1SA    TX       AX        B1        04     02       TSO     0E18     0SA     1E18
      1TF   AK     .  06 02A      .    07 ORB      032-    03-      .    09 TXB
      TX      .                   .        .        .        .
      1SA    TX       AX        DSP       D3     D2       D       E       K       0B3
      0FL0   05       03        PE        TSO    TP       0E18    0SA     1E18    1TF
      AK      .    06 OTL       .     08 OL4      032-     02-      .       .       .

581   1SA    TX       AX        LX        04     TSO      0E18    0SA     1E18    1TF
      AK      .    06 LX        .     09 TXB      TX       .       .      0B4     0B2
      1SA    TO       TX        AC        B6     B1       D4      LX      0B4     0B2
      0FL0   05       PE        TP        0E18   0SA      1E18    1TF     AK       .   07
      ORB     .    09 TXB       TX
      1SA    TX       AX        B5        B1     DC       MN      03      02      TSO
      0E18   0SA      1E18      1TF       AK      .    07 B5       .    09 TXB     TX
      1SA    TX       AX        B3        B2     DC       MN      03      02      TSO
      0E18   0SA      1E18      1TF       AK      .    07 BL6      .    09 TXB     TX
      1SA    TX       AC        B5        B3     B2       D3      D2      0B4     0B2
      0FL0   05       03        02        PE     TP       0E18    0SA     1E18    1TF
      AK      .    08 OSHB      .     09 TXB      TX       .       .       .       .
      1SA    DSP      D3        D2        D      E        K       0B3     0FL0    04
      PE     TP       0E18      0SA       1E18   1TF      AK       .    09 OL4      .

582   1SA    DSP      D4        D2        D      E        K       0B3     0FL0    03
      02     PE       TP        0E18      0SA    1E18     1TF     AK       .    08 D43-
      1SA    DSP      D3        D         E      K        0B3     0FL0    03      02
      PE     TP       0E18      0SA       1E18   1TF      AK       .    08 D2-
      1SA    TO       DSP       D3        D2     D        E       K       0B3     0FL0
      03     02       PE        TP        0E18   0SA      1E18    1TF     AK       .   08
      TOB     .        .         .         .      .        .       .       .       .
      1SA    TO       AC        B6        B5     B3       B2      D4      D       LX
      0B4    0B2      0FL0      05        PE     TP       0E18    0SA     1E18    1TF
      AK      .    09 ED3       .
      1SA    TX       AC        B6        B5     B3       B2      K       LX      05
      0E18   0SA      1E18      1TF       AK      .    09 TXB      .    10 KIO     D-
       .  11 KIO       .
      1SA    TO       TX        AC        B6     B5       B3      B2      D4      LX
      0B4    0B2      05        PE        0E18   0SA      1E18    1TF     AK       .   10
      KIO     .    09 TXB       TX
```

Tape stops	Marker number		

```
583   1SA     TO           AX     DC          D4     D       K          MN      OB4     OB2
      OFLO    06           03     02          PE     TSO     OE18       OSA     1E18    1TF
      AK      .      10    OFLO   .     09    ED3    D       .    11    PE      .       .
      1SA     TO           AX     DC          D4     D       K          MN      OB4     OB2
      06      03           02     PE          TSO    TP      OE18       OSA     1E18    1TF
      AK      .      10    TPB    .     09    ED3    Q·      .          .       .       .
      1SA     TO           TX     AC          B6     B5      B3         B2      D4      LX
      OB4     OB2          OFLO   05          OE18   OSA     1E18       1TF     AK      .    11
      KIO     .      09    TXB    TX          .      .       .          .       .       .
      1SA     TO           AX     DC          D4     D       K          MN      OB4     OB2
      OFLO    06           03     02          TSO    TP      OE18       OSA     1E18    1TF
      AK      .      11    TPB    .     09    ED3    D       .          .       .       .
```

584   Flip-flop logic tests on logic for 03, 02, LP, QC, QP, QX, RC, RP, RX, TSO, TP, TX, TO, XC,
      XP, X2, XD, XR, CLC, PN, PP, and LX flip-flops.

585   03 or test, one side. Logic for one side 03 is on boards 317, 318, 319, 208.

```
      OSA     AK     B1     E            IC     K          ND      OB3     PE      TP
      OE18    1SA    1E18   1TF          03     .    01    .       .       .       .
      1SA     B6     B5     B3           B2     D          03      OE18    1SA     1E18
      1TF     03     .      01           B3     B2     K·   OE18    1SA    1E18    1TF
      OSA     B6     B5     B3           B2     K·         OE18    1SA     1E18    1TF
      03      .      02     .            .      .          .       .       .       .
      1SA     AK     B1     D            E      IC         ND      OB3     03      PE
      TP      OE18   1SA    1E18         1TF    03         .    02 .       .       .
      OSA     TX     AP     D            K      OB4        04      02      OE18    1SA
      1E18    1TF    03     .      03    .      .          .       .       .       .
      1SA     06     B2     05           03     XC         OE18    1SA     1E18    1TF
      03      .      03     .            .      .          .       .       .       .
      OSA     TX     D      K            04     XC         OE18    1SA     1E18    1TF
      03      .      04     .            .      .          .       .       .       .
      1SA     AP     B2     OB4          06     05         03      02      OE18    1SA
      1E18    1TF    03     .      04    .      .          .       .       .       .
```

586   03 and test, one side.

```
      1SA     AP     B6     B5          B3     B2      D       OB3     06      05
      03      02     XC     OE18        1SA    1E18    OTF     03      .    01 OB3
      .    04 D      .            .      .      .      .       .            .
      1SA     TX     B6     B5          B3     B2      IC      K       OB4     04
      03      TP     OE18   1SA         1E18   OTF     03      .    01 ICP     .
      1SA     TX     AK     B1          E      IC      K       ND      OB4     OB3
      04      03     PE     TP          OE18   1SA     1E18    OTF     03      .    02
```

```
      KD2        .          .          .          .          .          .          .          .          .
      1SA        AP         B1         D          IC         ND         OB3        06         05      02 03
      02         TP         XC         OE18       1SA        1E18       OTF        03         .          EAKO

      1SA        AK         AP         B1         D          E          IC         OB3        06         05
      03         02         PE         TP         XC         OE18       1SA        1E18       OTF        03
      .       02 ND-        .          .          .          .          .          .          .          .
      1SA        AK         AP         B4         B5         B1         D          E          IC         ND
      OB3        06         05         03         02         PE         TP         XC         OE18       1SA
      1E18       OTF        03         .       02 TLC        B5         .          .          .          .

587   1SA        AK         AP         B6         B1         D          E          IC         ND         OB3
      06         05         03         02         PE         TP         XC         OE18       1SA        1E18
      OTF        03         .       02 TLC        B6         .          D          E          IC         ND         OB3
      1SA        AK         AP         B3         B2         D          E          IC         ND         OB3
      06         05         03         02         PE      04 TP         XC         OE18       1SA        1E18
      OTF        03         .       02 BL6        .       04 D          06         05         03         PE         OE18
      1SA        AK         B2         E          ND         06         05         03         PE         OE18
      1SA        1E18       OTF        03         .       03 XC-        .       01 ICP        KDIC       D-

      1SA        B2         K          04         03         XC         OE18       1SA        1E18       OTF
      03         .       03 OJ         OFLO       06         05         XC         OE18       BSD        03
      1SA        B2         ND         OFLO       06         05      01 XC         OE18       BSD        03
      1E18       OTF        03         .       03 03-        .       01 ICP        KDIC       D-         PE
      1SA        AK         B2         E          ND         OB4        06         05         03         PE
      XC         OE18       1SA        1E18       OTF        03         .       03 OB4        .       01 ICP
      KDIC       D-         .          .          .          .          .          .          .          .
      1SA        TX         AK         B1         E          ND         06         05         03         PE
      XC         OE18       1SA        1E18       OTF        03         .       03 TXF        .       01 ICP
      KDIC       D-         .       02 KD2        D-         .          .          .          .          .

588   1SA        AK         B2         E          ND         OB4        06         05         03         02
      PE         OE18       1SA        1E18       OTF        03         .       04 AP-        .       01 ICP
      KDIC       D-         .          .          .          .          .          .          .          .
      1SA        AP         B2         K          OB4        04         03         02         OE18       1SA
      1E18       OTF        03         .       04 OJ         .          .          .          .          .
      1SA        AP         B6         B5         B3         B2         IC         K          OB4        06
      05         02         TP         OE18       BSC        03         1E18       OTF        03         .
      .       04 03-        .          .          .          .          .          .          .          .
      1SA        AK         AP         B2         E          ND         OB4        06         05         03
      PE         OE18       1SA        1E18       OTF        03         .       04 02-        .       01 ICP
      KDIC       D-         .          .          .          .          .          .          .          .
      1SA        TX         AK         AP         B1         E          ND         OB4        06         05
      03         02         PE         OE18       1SA        1E18       OTF        03         .       04 TXF
      .       01 ICP        KDIC       D-         .       02 KD2        D-         .          .          .
```

Tape stops	Marker number										

589   03 or test, zero side. Logic for zero side 03 is on boards 316, 318, 319.

OSA	B2	CR7	IC	K	ND	OFLO	05	03	TP
OE18	OSA	1E18	OTF	03	. 01	.	.	.	.
1SA	TX	D	E	OB4	OB3	04	02	OE18	OSA
1E18	OTF	03	. 01	.	.	.	.	.	.
OSA	TX	E	K	OB3	06	03	OE18	OSA	1E18
OTF	03	. 02	.	.	.	.	.	.	.
1SA	CR7	IC	05	TP	OE18	OSA	1E18	OTF	03
. 02	.								
OSA	D	E	03	OE18	OSA	1E18	OTF	03	. 03
1SA	K	OE18	OSA	1E18	OTF	03	. 03	.	.
OSA	TX	K	OB4	OB3	04	03	02	OE18	OSA
1E18	OTF	03	. 04	.	.	.	.	.	.
1SA	B2	IC	ND	OFLO	06	05	TP	OE18	OSA
1E18	OTF	03	. 04	.	.	.	.	.	.

590   03 and test, zero side.

1SA	TX	D	E	OB4	04	02	OE18	OSA	1E18
1TF	03	. 01	OB3-	.	OB4	OB3	04	02	TP
1SA	TX	E	IC	K					
OE18	OSA	1E18	1TF	03	. 01	ICP	. 03	KED3	ED3
E	.	.	.	.	.	.	.	.	.
1SA	TX	CR7	E	IC	K	OB4	04	02	TP
OE18	OSA	1E18	1TF	03	. 02	KIOX	. 03	KED3	ED3
E	.	.	.	OFLO	05	TP	OE18	OSA	1E18
1SA	B2	IC	ND						
1TF	03	. 02	CR7-	. 03	KED3	KC-	K-	. 04	OJ
06-	.	.	IC	OB4	04	02	TP	OE18	OSA
1SA	TX	E							
1E18	1TF	03	. 03	KED3					
1SA	B2	CR7	IC	ND	06	05	TP	OE18	OSA
1E18	1TF	03	. 04	OFLO-	. 02	KIOX	KO6	06	. 03
KED3	KC-	K-	.	.	.	.	.	.	.

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1SA	B2	E	IC	K	ND	OFLO	04	TP	OE18
OSA	1E18	1TF	03	. 04	OJ	. 03	KED3	ED3	E
1SA	B2	CR7	IC	ND	OFLO	06	05	02	TP
OE18	OSA	1E18	1TF	03	. 04	032	. 02	KIOX	KO6
06	. 03	KED3	KD-	K-					
1SA	B2	CR7	IC	ND	OB4	OFLO	06	05	TP
OE18	OSA	1E18	1TF	03	. 04	OB4	. 02	KIOX	KO6
06	. 03	KED3	KC-	K-	.	.	.	.	.
1SA	TX	IC	OFLO	06	05	TP	OE18	OSA	1E18
1TF	03	. 04	NDX-	. 03	KED3	KC-	K-	.	.

592 02 or test, one side. Logic for one side 02 is on boards 222, 223, 228.

OSA	B2	IC		K		OB2	06		03		TP	OE18	1SA	
1E18	1TF	02		.	01	.			.		.	OE18	1SA	1E18
1SA	TX	D		E		ND	05		02		OE18	1SA	1E18	
1TF	02		01	.		.			.		.	OE18	1SA	1E18
OSA	TX	E		K		ND	05		OE18		1SA	1E18	1TF	
02	.	02		.		.			.		.	.	.	.
1SA	B2	CR6		IC		NC	OB2		06		04	03	02	
TP	OE18	1SA		1E18		1TF	02		.	02	.	.	1SA	.
OSA	TX	CR6		E		K	NC		05		OE18	1SA	1E18	
1TF	02	03		.		.			.		.	.	.	.
1SA	B2	IC		OB2		06	04		03		02	TP	OE18	
1SA	1E18	1TF		02		.	03		.		.	.	.	.
OSA	CR4	C5		D		E	K		05		04	TP	OE18	
1SA	1E18	1TF		02		.	04		.		.	.	.	.

593

1SA	06	03	02		OE18	1SA	1E18	1TF	02	.	04
OSA	D	E		K	05	04	TP	OE18	1SA	1E18	
1TF	02	.	05	.	.	.	.	OE18	1SA	1E18	
1SA	CR4	C5	06		03	02	OE18	1SA	1E18	1TF	
02	.	05	.	.	.	.	.	.	.	.	

594 02 and test, one side.

1SA	TX	D		E		ND	OB2		05		02		OE18	1SA	
1E18	OTF	02		.	01	OB2	.		.		.		OE18	1SA	.
1SA	TX	E		IC		K	ND		05		02		TP	OE18	
1SA	1E18	OTF		02		.	01	ICP	.		.		.	.	.
1SA	B2	IC		NC		OB2	06		04		03		02	TP	
OE18	1SA	1E18		OTF		02	.	02	CR6-		.	03	NC	.	
1SA	B2	CR6		E		IC	K		OB2	05		02		TP	.
OE18	1SA	1E18		OTF		02	.	02	OMNF		.		.	.	
1SA	TX	CR6		IC		NC	ND		OB2	06		04		03	.
02	TP	OE18		1SA		1E18	1TF	02	.	02	NDX	.			
1SA	B2	CR6		IC		OB2	06		04		03		02	TP	
OE18	1SA	1E18		OTF		02	.	03	CR6		.	02	OMNF	NC-	
1SA	B2	E		IC		K	OB2		05		02		TP	OE18	
1SA	1E18	OTF		02		.	03	OM	.		.		.	.	.

Tape stops	Marker number											

	595	1SA	TX	IC	OB2	06	04	03	02	TP	0E18	
		1SA	1E18	OTF	02	.	03	TXF	.	.	.	.
		1SA	B2	CR6	C5	NC	06	03	02	0E18	1SA	02
		1E18	OTF	02	.	04	C5	.	01	ICP	KDIC	D- . 02
		OMNF	OM	04-	.	05	CR4	.	.	.	.	
		1SA	B2	CR6	CR4	NC	06	03	02	0E18	1SA	02
		1E18	OTF	02	.	04	CR4	.	01	ICP	KDIC	D- . 02
		OMNF	OM	04-	.	05	C5-					
		1SA	TX	E	IC	K		ND	OB2	05	02	0E18
		1SA	1E18	OTF	02	.	04	ODO	.	.	.	
		1SA	B2	CR6	NC	06		03	02	TP	0E18	1SA
		1E18	OTF	02	.	04	TPA	.	02	OMNF	OM	04- .
		1SA	TX	CR4	C5	E	IC	K		ND	OB2	05
		02	0E18	1SA	1E18	OTF	02	.	05	ODO	.	.

	596	1SA	B2	CR6	CR4	C5	NC	06	03	02	TP	
		0E18	1SA	1E18	OTF	02	.	05	TPA	.	02 OMNF	OM
		04-	.	.	.	.	.	.	.	.	.	.

	597	02 or test, zero side. Logic for zero side 02 is on board 222.										
		OSA	B2	IC	K	NC	02	TP	0E18	OSA	1E18	
		OTF	02	. 01	.	.	.	.	.	.	.	
		1SA	TX	CR6	D	E	OB2	05	0E18	OSA	1E18	
		OTF	02	. 01	.	.	.	.	.	.	.	
		OSA	TX	CR6	E	K	OB2	05	02	0E18	OSA	
		1E18	OTF	02	. 02	.	.	.	.	.	.	
		1SA	B2	IC	NC	06	04	03	TP	0E18	OSA	
		1E18	OTF	02	. 02	.	.	.	.	.	.	
		OSA	B6	D	E	K	05	04	02	TSO	0E18	
		OSA	1E18	OTF	02	. 03	.	.	.	.	.	
		1SA	06	03	0E18	OSA	1E18	OTF	02	. 03	.	
		OSA	D	E	K	06	05	03	02	TP	0E18	
		OSA	1E18	OTF	02	. 04	.	.	.	.	.	

	598	1SA	AK	04	0E18	OSA	1E18	OTF	02	. 04	.	
		OSA	D	E	02	0E18	OSA	1E18	OTF	02	. 05	
		1SA	K	0E18	OSA	1E18	OTF	02	. 05	.	.	

	599	02 and test, zero side.										
		1SA	TX	CR6	D	E	05	0E18	OSA	1E18	1TF	
		02	. 01	.	OB2-	.	.	.	.	.	.	
		1SA	TX	B6	CR6	E	IC	K	OB2	05	TSO	
		TP	0E18	OSA	1E18	1TF	02	. 01	ICP	. 05	KED3	
		ED3	E	.	.	.	.	.	.	.	.	

```
      1SA        B2         CR6        IC         NC         06         04         03         TP         0E18
      OSA        1E18       1TF        02         .      02  CR6        .      03  0DO        0D         04
             05  KED3       KC-        K-         .          .          .          .          .          .
      1SA        B6         B2         E          IC         K          05         TSO        TP         0E18
      OSA        1E18       1TF        02         .      02  OMNF       .      05  KED3       ED3        E
      1SA        TX         IC         NC         06         04         03         TP         0E18       OSA
      1E18       1TF        02         .      02  TXF        .      03  0DO        0D         04         .      05
      KED3       KC-        K-         .                     .          .          .          .
      1SA        TX         CR6        E      03  IC         K          05         TP         0E18       OSA
      1E18       1TF        02         .      03  0DO        .      05  KED3       ED3        E          .

600   1SA        B6         B2         NC         0B2        06         03         TSO        0E18       OSA
      1E18       1TF        02         .      03  T32        .      01  ICP        KDIC       D-         .      02
      OMNF       OM         04-        .      05  KED3       KC-        K-         .          .          TSO
      1SA        TX         AK         B6         CR6        E          IC         K      05  05         TSO
      0E18       OSA        1E18       1TF        02         .      04  OTL        .      05  KED3       ED3
      E          .          .          .          .          .          .          .          .
      1SA        0B2        04         0E18       OSA        1E18       1TF        02         .      04  AK-
             01  ICP        KDIC       D-         .      05  KED3       KC-        K-         .          .
      1SA        AK         04         TP         0E18       OSA        1E18       1TF        02         .      04
      TPA        .      05  KED3       KC-        K-         .          .          .          .          .
      1SA        TX         B6         CR6        E          IC         05         TSO        TP         0E18
      OSA        1E18       1TF        02         .      05  KED3       .          .          .          .

601   LP or test, one side.  Logic for one side LP is on boards 239, 240.
      OSA        E          K          LC         LX         NC         05         04         0E18       1SA
      1E18       1TF        LP         .      01  .          .          .          .          .          .
      1SA        TX         LP         06         03         TP         0E18       1SA        1E18       1TF
      LP         .      01  .          .          .          .          .          .          .          .
      OSA        AX         E          K          LC         05         0E18       1SA        1E18       1TF
      LP         .      02  .          .          .          .          .          .          .          .
      1SA        TX         C2         LP         LX         MC         06         04         TP         0E18
      1SA        1E18       1TF        LP         .      02  .          .          .          .          .
      OSA        B4         B2         B1         LX         0E18       1SA        1E18       1TF        LP
      .      03  .          AX         B3         C5         E          LC         LP         05         02
      1SA        TX         AX         B3         C5         E          LC         LP         .      03  02
      TP         A0         0E18       1SA        1E18       1TF        LP         .      03  .          .
      OSA        C2         E          K          MC         05         0E18       1SA        1E18       1TF
      LP         .      04  .          .          .          .          .          .          .          .
      1SA        TX         AX         LP         LX         NC         06         03         TP         0E18
      1SA        1E18       1TF        LP         .      04  .          .          .          .          .
      OSA        E          K          LC         LX         MC         05         0E18       1SA        1E18
      1TF        LP         .      05  .          .          .          .          .          .          .
```

Tape stops	Marker number

```
602   1SA   TX          AX    C2    LP          NC        06    03        TP    0E18
      1SA   1E18        1TF   LP    .     05    .         .     .         .     1TF
      OSA   TX          CR3   E     K           05        0E18  1SA       1E18  1TF
      LP    .     06    .     .     .           .         .     .         .     .
      1SA   AP          B2    LP    06          04        03    0E18      1SA   1E18
      1TF   LP          .     06   .           .         .     .         .     .
      OSA   TX          C6    E     K           05        04    0E18      1SA   1E18
      1TF   LP          .     07   .           .         .     .         .     .
      1SA   AP          B2    LP    06          03        0E18  1SA       1E18  1TF
      LP    .     07    .     .     .           .         .     .         .     .
      OSA   TX          B4    B2    B1          CR2       C5    C3        E     K
      LX    06          05    04    03          02        0E18  1SA       1E18  1TF
      LP    .     08    .     .     .           .         .     .         .     .
      1SA   B3          CR5   CR4   CR3         LP        TS0   0E18      1SA   1E18
      1TF   LP          .     08   .           .         .     .         .     .
      OSA   B4          B2    B1    C6          C5        E     K         LC    06
      05    04          03    02    TS0         0E18      1SA   1E18      1TF   LP
      .     09          .     .     .           .         .     .         .     .

603   1SA   TO          TX    AX    B3          LP        A0    0E18      1SA   1E18
      1TF   LP          .     09   .           .         .     .         .     .
      OSA   TO          C5    D     E           K         06    05    10  04    03
      02    A0          0E18  1SA   1E18        1TF       LP    .         .     .
      1SA   TX          B6    B4    C6          C3        LP    LX        TP    0E18
      1SA   1E18        1TF   LP    .     10    .         .     .         .     .
      OSA   TO          AX    B3    CR2         C5        E     K         06    05
      04    03          02    IX    0E18        1SA       1E18  1TF       LP    .    11
      1SA   B6          B4    B2    B1          CR5       CR4   CR3       C6    C3
      D     LP          LX    0E18  1SA         1E18      1TF   LP        .    11  .
      OSA   TO          TX    B3    CR2         C5        E     K         LX    06
      05    04          03    02    0E18        1SA       1E18  1TF       LP    .    12
      1SA   B6          B4    B2    B1          CR5       CR4   CR3       C6    C3
      D     LP          IX    0E18  1SA         1E18      1TF   LP        .    12  .

604   OSA   TX          B4    B2    B1          CR5       CR4   CR3       E     K
      06    05          04    03    02          0E18      1SA   1E18      1TF   LP
      .     13          .     .     .           .         .     .         .     .
      1SA   AX          B3    CR2   C5          LP        0E18  1SA       1E18  1TF
      LP    .     13    .     .     .           .         .     .         .     .
      OSA   B6          LC    05    0E18        1SA       1E18  1TF       LP    .    14
      1SA   K           LP    LX    0E18        1SA       1E18  1TF       LP    .    14
      OSA   LC          QC    0E18  1SA         1E18      1TF   LP        .    15  .
      1SA   B6          K     LP    LX          0E18      1SA   1E18      1TF   LP
```

```
        .    15   .              .          .          .          .          .              .    16   .
OSA      AX        LC             OE18       1SA        1E18       1TF        LP                  16   LP
1SA      B6        K              LP         QC         OE18       1SA        1E18       1TF        LP
        16   .
OSA      AP        B2      .  E   .  K       .  05      .  TP      .  OE18     .  1SA      .  1E18
1TF      LP        .    17 .
1SA      CR3       C6             D          LP         06         03         OE18       1SA        1E18
1TF      LP        .    17 .
```

605   LP and test, one side.
```
1SA      TX        B2             D          LP         LX         MC         06         03         TP
OE18     1SA       1E18           OTF        LP         .    01 LX    .    02 OMF        04B-
04-      .    04 NC-    .    07 TXF          TX         .    14 KLC-       KB-        K-
.    17 TPB       TP
1SA      TX        AX             B6         B3         C6         C5         E          K          LP
05       02        TP             A0         OE18       1SA        1E18       OTF        LP         .    01
0D       .    03 LC-    .    15 LX-
1SA      TX        B6             B2         D          LP         MC         NC         06         03
QC       TP        OE18           1SA        1E18       OTF        LP         .    01 NC    .    02
OMF      04B-      04-    .    03 LC-          .    04 LX-        .    05 C2-        .    07
TXF      TX        .    16 KLC-       KB-        K-         .    17 TPB       TP         .
1SA      TX        AX             B2         C2         D          LP         LX         MC         NC
06       04        03             TP         OE18       1SA        1E18       OTF        LP         .    02
AX       .    04 C2      .    05 LX           .    14 KLC-       KB-        K-         .    17
TPB      TP
```

606
```
1SA      TX        B2             C2         D          LP         LX         NC         06         04
03       TP        OE18           1SA        1E18       OTF        LP         .    02 MC-        .    04
C2       .    05 LX      .    14 KLC-        KB-        K-         .    17 TPB       TP
1SA      TX        B2             C2         D          LC         LP         LX         MC         NC
06       04        03             TP         OE18       1SA        1E18       OTF        LP         .    02
LC       .    03 .             LX            .    04 C2    .    05 LX         .    17 TPB
TP
1SA      TX        B3             C6         C5         E          K          LP         MC         05
02       QC        TP             A0         OE18       1SA        1E18       OTF        LP         .    02
OMF      .    03 LC-    .    16 B6-
1SA      TX        AX             B6         B3         C6         C5         E          K          LC
LP       LX        NC             05         02         TP         A0         OE18       1SA        1E18
OTF      LP        .    04 OMD          .    03 LX         .    15 KLC-       LC         .
1SA      TX        AX             B6         B3         C6         C5         C2         E          K
LP       NC        05             02         TP         A0         OE18       1SA        1E18       OTF
LP       .    05 OMD          .    03 LC-        .    15 LX-
```

Tape stops	Marker number													
	607	1SA	TX		AX	B2	C2	D	LP		06		04		03
		TP	0E18		1SA	1E18	OTF	LP	.	05	NC-		.	01	0D
		04	.	03	LC-	.	17	TPB	TP		.		.		.
		1SA	AP		AX	CR3	C6	C2	LC		LP		NC		06
		03	TP		0E18	1SA	1E18	OTF	LP		.	05	TXP-		.
		1SA	AP		B2	CR3	LP	LX	MC		NC		06		04
		03	TP		0E18	1SA	1E18	OTF	LP		.	06	CR3		.	07
		0D	04		.	14	KLC-	KB-	K-		.		.		.
		1SA	AP		AX	B3	B2	CR5	CR4		C6		C5		E
		LC	LP		05	02	TP	0E18	iSA		1E18		OTF		LP
		.	06	OM		.		.		.		.		.
		1SA	AP		B2	C6	LC	LP	06		03		TP		0E18
		1SA	1E18		OTF	LP	.	07	C6		.	06	OM		04-	.
		1SA	AP		AX	B3	B2	CR5	CR4		CR3		C5		E
		LC	LP		05	02	TP	0E18	1SA		1E18		OTF		LP
		.	07	0D	.		.		.		.		.		.
	608	1SA	TX		AP	C2	LP	LX	MC		06		03		TP
		0E18	1SA		1E18	OTF	LP	.	07	TXF		.	01	LX	.	02
		OMF	04B-		04-	.	14	KLC-	KB-		K-		.		.
		1SA	TX		B6	B4	CR5	CR4	CR3		LC		LP		LX
		TSO	TP		0E18	1SA	1E18	OTF	LP		.	08	LX		.	03
		LX	.	10	TO1C	C3-	- .							
		1SA	AX		B3	CR5	CR4	CR3	C3		LO		LP		TSO
		TP	A0		0E18	1SA	1E18	OTF	LP		.	08	C3		.
		1SA	B3		CR5	CR4	CR3	C6	LC		LP		TP		0E18
		1SA	1E18		OTF	LP	.	08	TSO-		.		.		.
		1SA	T0		TX	AX	B3	CR2	C6		LP		TP		A0
		0E18	1SA		1E18	OTF	LP	.	09	C6		.	03	LC-	.	08
		TSO-	.	13	TX	.		.		.		.		.		.
	609	1SA	T0		TX	AX	B3	CR2	LC		LP		LX		TP
		A0	0E18		1SA	1E18	OTF	LP	.	09	LC		.	03	LX
		.	13	TX	.		.		.		.		.		.
		1SA	T0		TX	AX	B3	CR2	C3		LP		TSO		TP
		A0	0E18		1SA	1E18	OTF	LP	.	09	TSO		.	03	LC-
		.	08	C3	.	13	TX	.		.		.		.
		1SA	TX		AX	B3	CR5	CR4	CR3		LP		TP		A0
		0E18	1SA		1E18	OTF	LP	.	09	TOX-		.	03	LC-	.	08
		TSO-	.		.		.		.		.		.		.
		1SA	TX		B6	B4	B2	B1	CR2		C6		C3		LC
		LP	LX		TP	A0	0E18	1SA	1E18		OTF		LP		.	10
		A0	.	03	LX	.	11	QT1	D-		.	13	TX		.
		1SA	TX		AX	B6	B4	B3	CR2		C6		C3		D
		LC	LP		LX	TP	0E18	1SA	1E18		OTF		LP		.	10
		D	.	03	LX	.	13	TX	.		.		.		.

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610   1SA      TX       CR5      CR4      CR3      C6       LC          LP       LX          TSO
      TP    08 OE18     1SA      1E18     OTF      LP       .        10 TO1C     .        03 LX
      .        LX       .        .        .        .        .           .        .           .
      1SA      TX       AX       B6       B4       B2       B1          CR5      CR4         CR3
      C6       C3       D        LC       LP       LX       TP          OE18     1SA         1E18
      OTF      LP       .     11 AX       .     03 LX       .        10 D        .           .
      1SA      TX       B6       B4       B2       B1       CR5         CR4      CR3         C6
      D        LC       LP       LX       TSO      TP       OE18        1SA      1E18        OTF
      LP       .     11 C3-      .     03 LX       .     08 LX          .        .           .
      1SA      TX       B6       B4       B2       B1       CR5         CR4      CR3         C6
      C3       D        LC       LP       LX       TP       IX          OE18     1SA         1E18
      OTF      LP       .     11 IX       .     03 LX       .        10 D        .        12 LX
      1SA      TX       B3       CR5      CR4      CR3      C6          C3       LC          LP
      LX       TP       A0       OE18     1SA      1E18     OTF         LP       .        11 QT1
      .     03 LX       .        .        .        .        .           .        .           .

611   1SA      AX       B6       B4       B2       B1       CR5         CR4      CR3         C6
      C3       D        LC       LP       TSO      TP       OE18        1SA      1E18        OTF
      LP       .     12 IX-      .     08 C3       .     11 AX          .        .           .
      1SA      B3       CR5      CR4      CR3      C6       C3          LC       LP          TSO
      TP    08 A0       IX       OE18     1SA      1E18     OTF         LP       .        12 QT1
      .        C3       .        .        .        .        .           .        .           .
      1SA      AP       AX       B6       B4       B2       B1          CR5      CR4         CR3
      C6       C5       D        E        LC       LP       05          02       TP          IX
      OE18     1SA      1E18     OTF      LP       .     12 OYCS        .        LP          TP
      1SA      AX       B3       CR4      CR2      C5       13 CR4       LP       TSO         TP
      OE18     1SA      1E18     OTF      LP       LP       TSO         TP       OE18        1SA
      1SA      AX       B3       C5       LC       LP                   .        .           .
      1E18     OTF      LP       .     13 CR2-                          .        .           .
      1SA      AP       AX       B3       CR5      CR3      CR2         C6       C5          E
      LC       LP       05       02       TP       OE18     1SA         1E18     OTF         LP
      .     13 OYR      .        .        .        .        .           .        .           .

612   1SA      K        LP       LX       05       OE18     1SA         1E18     OTF         LP
      .     14 05       .     15 B6-      .        .        .           .        .
      1SA      TX       AX       B6       K        LP       LX          NC       06          03
      QC       TP       OE18     1SA      1E18     OTF      LP          .     14 B6          .   04
      OMD      K        .     15 QC       .     16 AX       .           .        .
      1SA      TX       K        LP       06       03       QC          TP       OE18        1SA
      1E18     OTF      LP       .     14 LX-      .     01 OD          K        .        03 LC-
      .     16 B6-      .        .        .        .        .           .
      1SA      TX       AP       AX       CR5      CR4      CR3         C6       C5          E
      LC       LP       LX       NC       06       03       02          TP       OE18        1SA
      1E18     OTF      LP       .     14 KLC-     .     03 LX          .     04 OMD         E
      1SA      TX       AP       AX       B6       B3       CR5         CR4      CR3         C6
      C5       E        LC       LP       LX       05       02          TP       A0          OE18
      1SA      1E18     OTFLP    .     15 KLC-     .     03 LX          .        .           .
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Tape
stops

Marker
number

613   1SA   TX   B6   K   16   LP   06   03   TP   OE18   1SA

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613   1SA     TX      B6      K       16  LP      06      03      TP      OE18    1SA
      1E18    OTF     LP      .           QC-     .    01 OD      K       .    03 LC-
      .    15 LX-     .       .           B3      .       .       .       .       .
      1SA     TX      AP      B6          CR5     CR4     CR3     C6      C5
      E       LC      LP      LX      05  02      QC          TP      A0      OE18
                                                          03
      1SA     1E18    OTF     LP      .   16  KLC-        03  LX      .       .
      OE18    1SA     1E18    OTF     LP      D       17  LC      LP      06      03
                                              .       AP
      1SA     TX      AX      B3      CR5     CR4     CR3     C6      C5      E
      LC      LP      05      02      OE18    1SA     1E18    OTF     LP      .    17
      OMDL    .       .       .       .       .       .       .       .       .
      1SA     TX      AX      CR3     C6      C2      D       LC      LP      LX
      06      03      TP      OE18    1SA     1E18    OTF     LP      .    17 TPB
      .    01 LX      .    03 L3      .       .       .       .       .       .

614   LP or test, zero side.  Logic for zero side LP is on boards 237, 238, 239, 240.
      OSA     E       K       LC      LP      NC      05      04      OE18    OSA
      1E18    OTF     LP      .    01 .       .       .       .       .       .
      1SA     TX      LX      06      03      TP      OE18    OSA     1E18    OTF
      LP      .    01 .       .       .       .       .       .       .       .
      OSA     E       K       LC      LP      LX      05      OE18    OSA     1E18
      OTF     LP      .    02 .       .       .       .       .       .       .
      1SA     TX      AX      C2      MC      06      04      TP      OE18    OSA
      1E18    OTF     LP      .    02 .       .       .       .       .       .
      OSA     AX      B4      B2      B1      LP      A0      OE18    OSA     1E18
      OTF     LP      .    03 .       .       .       .       .       .       .
      1SA     TX      B3      C5      E       LC      LX      02      TP      ·OE18
      OSA     1E18    OTF     LP      .    03 .       .       .       .       .
      OSA     AX      C2      E       K       LP      LX      MC      05      OE18
      OSA     1E18    OTF     LP      .    04 .       .       .       .       .

615   1SA     TX      NC      06      03      TP      OE18    OSA     1E18    OTF
      LP      .    04 .       .       .       .       .       .       .       .
      OSA     AX      E       K       LC      LP      MC      05      OE18    OSA
      1E18    OTF     LP      .    05 .       .       .       .       .       .
      1SA     TX      C2      LX      NC      06      03      TP      OE18    OSA
      1E18    OTF     LP      05      .       .       .       .       .       .
      OSA     TX      B4      B2      B1      CR4     C5      C3      E       K
      LP      06      05      04      03      02      OE18    OSA     1E18    OTF
      LP      .    06 .       .       .       .       .       .       .       .
      1SA     B3      CR5     CR3     CR2     LX      TSO     OE18    OSA     1E18
      OTF     LP      .    06 .       .       .       .       .       .       .
      OSA     AX      B4      B2      B1      C5      E       K       LC      LP
      06      05      04      03      02      TSO     A0      OE18    OSA     1E18
      OTF     LP      .    07 .       .       .       .       .       .       .
      1SA     TO      TX      B3      C6      OE18    OSA     1E18    OTF     LP
      .    07 .       .       .       .       .       .       .       .       .
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616   OSA    TO    C6    C5     D      E      K      LC     LP     06
      05     04    03    02     0E18   OSA    1E18   OTF    LP     .    08
      1SA    TX    B6    B4     C3     TP     A0     0E18   OSA    1E18
      OTF    LP    .  08 .      .      .      .      .      .      .
      OSA    TO    TX    B3     CR4    C6     C5     E      K      LP
      06     05    04    03     02     IX     0E18   OSA    1E18   OTF
      LP     .  09 .      .      .      .      .      .      .      .
      1SA    AX    B6    B4     B2     B1     CR5    CR3    CR2    C3
      D      0E18  OSA   1E18   OTF    LP     .  09  E      K      LP
      OSA    TO    TX    B3     CR4    C6     C5     E      K      LP
      06     05    04    03     02     0E18   OSA    1E18   OTF    LP
      .   10 .
      1SA    B6    B4    B2     B1     CR5    CR3    CR2    C3     D
      LX     IX    0E18  OSA    1E18   OTF    LP     .  10  C3  .  D  .
      OSA    TX    AX    B4     B2     B1     CR5    CR3    E      K
      LP     06    05    04     03     02     0E18   OSA    1E18   OTF
      LP     .  11 .      .      .      .      .      .      .      .

617   1SA    B3    CR4   CR2    C5     0E18   OSA    1E18   OTF    LP
      .   11 .
      OSA    TX    AX    B4     B2     B1     CR5    CR4    CR3    CR2
      E      K     LP    06     05     04     03     02     0E18   OSA
      1E18   OTF   LP    .  12  .      .      .      .      .      .
      1SA    B3    C5    0E18   OSA    1E18   OTF    LP     .  12  .
      OSA    B6    LC    LP     0E18   OSA    1E18   OTF    LP     .  13
      1SA    K     05    0E18   OSA    1E18   OTF    LP     .  13  .
      OSA    B6    LC    LP     LX     05     0E18   OSA    1E18   OTF
      LP     .  14 .      .      .      .      .      .  14  .      .
      1SA    K     0E18  OSA    1E18   OTF    LP     .      OSA    1E18   OTF    LP
      OSA    LC    LP    LX     QC     0E18   OSA    1E18   OTF    LP
      .   15 .
      1SA    B6    K     0E18   OSA    1E18   OTF    LP     .  15  .
      OSA    LC    LP    0E18   OSA    1E18   OTF    LP     .  16  .
      1SA    AX    B6    K      QC     0E18   OSA    1E18   OTF    LP
      .   16 .      .      .      .      .      .      .      .

618   OSA    E     K     LC     LP     05     04     03     02     0E18
      OSA    1E18  OTF   LP     .  17  .      OSA    1E18   OTF    LP     .    17
      1SA    TX    06    TP     0E18   OSA    1E18   OTF    LP     .    17
      OSA    E     K     LP     05     TP     0E18   OSA    1E18   OTF
      LP     .  18 .      .      .      .      .      .      .
      1SA    AP    D     06     03     0E18   OSA    1E18   OTF    LP
      .   18 .      .      .      .      .      .      .      .
      OSA    D     E     K      LP     05     TP     0E18   OSA    1E18
      OTF    LP    .  19 0E18   OSA    1E18   OTF    LP     .      19
      1SA    06    03    0E18   OSA    1E18   OTF    LP     .  19  .
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Tape   Marker
stops   number

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619   LP and test, zero side.
      1SA     TX      AP      AX      D       MC      06      03      TP      OE18
      OSA     1E18    1TF     LP      .   01  LX-     .   02  OMF     03      .   18
      TPB     TP      .       .       .
      1SA     TX      B6      B3      C5      E       K       LX      05      02
      TP      OE18    OSA     1E18    1TF     LP      .   01  OD      .   03  LC-
      .   13  B6      .   15  LX      .       .       .       .       .
      1SA     TX      AP      AX      B6      D       LX      MC      NC      06
      03      QC      TP      OE18    OSA     1E18    1TF     LP      .   01  NC
      .   02  OMF     04B     04-     .   03  LC-     .   04  LX      .   05  C2-
      .   16  KLC-    KB-     K-      .   17  OX      03      .   18  TPB     .TP
      1SA     TX      AP      C2      D       MC      NC      06      04      03
      TP      OE18    OSA     1E18    1TF     LP      .   02  AX-     .   04  C2
      .   05  LX-     .   14  KLC-    KB-     K-      .   18  TPB     TP      .

620   1SA     TX      AP      AX      C2      D       NC      06      04      03
      TP      OE18    OSA     1E18    1TF     LP      .   02  MC-     .   04  C2
      .   05  LX-     .   14  KLC-    KB-     K-      .   18  TPB     TP      .
      1SA     TX      AX      B6      B3      C5      E       LX      MC      06
      03      02      QC      TP      OE18    OSA     1E18    1TF     LP      .   02
      OMF     .   01  .       OD      E       .   03  LC-     .   16  KLC-    KB-
      K-      .       .       .       .       .       .
      1SA     TX      AP      AX      C2      D       LC      MC      NC      06
      04      03      TP      OE18    OSA     1E18    1TF     LP      .   02  LC
      .   03  LX-     .   03  C2      .   05  LX-     .   18  TPB     TP      .
      1SA     TX      B6      B3      C5      E       K       LC      NC      02
      TP      OE18    OSA     1E18    1TF     LP      .   04  OMD     .   03  LX-
      .   15  KLC-    LC      .       .       .       .
      1SA     TX      B6      B3      C5      C2      E       K       LX      NC
      05      02      TP      OE18    OSA     1E18    1TF     LP      .   05  OMD
      .   03  LC-     .   13  B6      .   15  LX      .       .       .       .

621   1SA     TX      AP      C2      D       LX      06      04      03      TP
      OE18    OSA     1E18    1TF     LP      .   05  NC-     .   01  OD      04
      .   03  LC-     .   18  TPB     TP      .       .       .       .
      1SA     C2      D       LC      LX      NC      06      03      TP      OE18
      OSA     1E18    1TF     LP      .   05  TXP-    .       .       .       .
      1SA     TX      B6      B4      CR5     CR3     CR2     LC      TSO     TP
      A0      OE18    OSA     1E18    1TF     LP      .   06  LX-     .   03  LX-
      .   08  TO1C    C3-     .       .       .       .
      1SA     B3      CR5     CR3     CR2     C3      LC      LX      TSO     TP
      OE18    OSA     1E18    1TF     LP      .   06  C3      .       .       .
      1SA     B3      CR5     CR3     CR2     LC      LX      TP      OE18    OSA
      1E18    1TF     LP      .   06  TSO-    .       .       .       .
      1SA     TO      TX      B3      CR4     LX      TP      OE18    OSA     1E18
      1TF     LP      .   07  C6-     .   03  LC-     .   06  TSO-    .   11  TX
      .   12  TXC     TX      .   17  OX      06-     .       .       .       .
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622   1SA    TO    TX    B3       CR4   C6       LC    TP       OE18  OSA
      1E18   1TF   LP    .    07  LC    .    03  LX-   .    11  TX    .    12
      TXC    TX    .          .          .          .
      1SA    TO    TX    B3       CR4   C6       C3    LX       TSO   TP
      OE18   OSA   1E18  1TF      LP         07  TSO   LX   03  LC-   .    06
      C3     .  11 TX    .    12  TXC   TX       .  17 OX         06-
      1SA    TX    B3    CR5      CR3   CR2      C6    LX       TP         OE18
      OSA    1E18  1TF   LP    07 .         TOX-   .   03  LC-   .    06  TSO
      .   17 OX    06-        .          .          .
      1SA    TX    AX    B6       B4    B2       B1    CR4      C3         LX
      QC        TSO   TP    OE18     OSA   1E18     1TF   LP       .    08  AO-
      .   03 LC-   .    06  C3         .     09  QT1   D-       .    11  TX   .  12
      TXC    TX    .    16  KLC-     KB-   K-       .   17  OX        06-
      1SA    TX    B6    B4       B3    CR4      C3    D        LX         TSO
      TP     AO    OE18  OSA      1E18  1TF      LP    .     08 D     .         03
      LC-    .  06 C3    .    11  TX    .    12  TXC   TX       .    17  OX
      06-    .          .          .          .          .

623   1SA    CR5   CR3   CR2      C3    LC       LX    TSO      TP         AO
      OE18   OSA   1E18  1TF      LP    .     08 TO1C   .    06  C3         .
      1SA    B6    B4    B2       B1    CR5      CR3   CR2      C3         D
      LC     LX    TSO   TP       OE18  OSA      1E18  1TF      LP    .         09
      AX-    .  06 C3    .    10  IX-   .          .          .          D
      1SA    AX    B6    B4       B2    B1       CR5   CR3      CR2        D
      TSO    OE18  OSA   1E18     1TF   LP       .  09 C3-      .    06  LX-
      .   15 KLC-  KB-   K-         .          .          .
      1SA    TX    AX    B6       B4    B2       B1    CR5      CR3        CR2
      C3     D     LC    TP       AO    IX       OE18  OSA      1E18       1TF
      LP     .  09 IX    .    03  LX-   .     08 D     .     10 LX-        .
      1SA    AX    B3    CR5      CR3   CR2      C3    LC       LX         TSO
      TP     OE18  OSA   1E18     1TF   LP       .  09 QT1      .    06  C3

624   1SA    B3    CR5   CR3      CR2   C3       LC    LX       TSO        TP
      IX     OE18  OSA   1E18     1TF   LP       .  10 QT1      .    06  C3
      1SA    B6    B4    B2       B1    CR5      CR3   CR2      C5         D
      E      LC    LX    02       TP    IX       OE18  OSA      1E18       1TF
      LP     .  10 OYC5  .        C5         LC    LX       TSO   TP       OE18  OSA
      1SA    B3    CR2   C5         LC    LX    12 CR2      .          .         .
      1E18   1TF   LP    .    11  CR4-  .          CR2   .          E          LC
      1SA    B6    B3    CR5      CR4   CR3      CR2   C5       E          LC
      LX     02    TP    OE18     OSA   1E18     1TF   LP       .    11  OYR
      1SA    B6    B3    CR5      CR3   C5       E     LC    12 LX         02
      TP     OE18  OSA   1E18     1TF   LP       .  12 OYR      OSA        1E18
      1SA    TX    B3    C5       LX    TSO      TP    OE18     OSA        1E18
      1TF    LP    .    12  TXC   .    03  LC-   .    17  OX        06-        .
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Tape   Marker
stops   number

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625   No test for 14 05.  No test for 15 B6-.
      1SA     TX      AX      K       LX        06      03      QC      TP      0E18
      0SA     0E18    1TF     LP      .  13 05-  .  01 OD      K       .  03
      LC-     .  14 LX      .  16 B6-  .       .       .       .
      1SA     CR4     LC      LX      05        TSO     TP      0E18    0SA     1E18
      1TF     LP      .  13 KLC-      .  11 OYR K065    05      .  12 OYR
      K065    05      .       .
      1SA     TX      B6      K       NC        06      03      QC      TP      0E18
      0SA     1E18    1TF     LP      .  14 B6   .  04 OMD     K       .  15
      QC      16 AX-  .
      1SA     TX      CR5     CR3     CR2       C5      E       LC      NC      06
      03      02      TP      0E18    0SA       1E18    1TF     LP      .  14 KLC-
      .  03 LX-      .  04 OMD       E       .       .       .       .
      1SA     TX      B6      B3      CR5       CR3     CR2     C5      E       LC
      NC      06      03      02      TP        0E18    0SA     1E18    1TF     LP
      .  15 KLC-      .  03 LX-       .  04 OMD E       .       .       .

626   1SA     TX      AX      B6      K         LX      06      03      TP      0E18
      0SA     1E18    1TF     LP      .  16 QC-  .  01 OD      K       .  03
      LC-     .  15 LX      .        B3      CR5     CR3     CR2     C5      E       LC
      1SA     AX      B6      B3      CR5       CR3     CR2     C5      E       LC
      LX      02      QC      TP      0E18      0SA     1E18    1TF     LP      .  16
      KLC-    .       .
      1SA     TX      B6      B3      CR5       CR3     CR2     C5      E       LX
      06      03      02      TP      0E18      0SA     1E18    1TF     LP      .  17
      OX      .  01 OD      E       .  03 LC-   .       .       TP      AO
      1SA     TX      B6      B4      C3        LC      NC      06      TP      AO
      0E18    0SA     1E18    1TF     LP        .  17 LC        .  03 LX-  .  04
      OMD     03-     .       LC      LX        06      03      0E18    0SA     1E18
      1SA     TX      D       LC      LX        06      03      0E18    0SA     1E18
      1TF     LP      .  18 AP-       .  19 OMDO ED3     D
      1SA     TX      AP      B6      B3        CR5     CR3     CR2     C5      E
      LC      LX      06      03      02        0E18    0SA     1E18    1TF     LP
      .  18 OMDL      .  19 OMDO      OMD       E       .  19 OMDO      ED3     E

627   1SA     AP      C2      D       LC        LX      NC      06      03      TP
      0E18    0SA     1E18    1TF     LP        .  18 TPB      .  05 TXP-   TX-
      1SA     TX      B6      B3      CR5       CR3     CR2     C5      E       LC
      LX      02      0E18    0SA     1E18      1TF     LP      .  19 OMDO   .
      1SA     C2      LC      LX      NC        06      03      TP      0E18    0SA
      1E18    1TF     LP      .  19 TPB        .  05 TXP-   TX-     .       .
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628   QC or test, one side.  Logic for one side QC is on boards 331, 332, 333, 338.
      0SA    TX      E        IP     0B3    05      03      0E18   1SA    1E18
      1TF    QC      .     01 .       .      .       .       .      .      .
      1SA    AK      D        K      0FL0   P       RC      QC     0E18   1SA
      1E18   1TF     QC      .    01 .       .       .       0E18   1SA    1E18   1TF
      0SA    TX   02 E        0B3    05      04      0E18   1SA    1E18   1TF
      QC     .    02 .
      1SA    AK      D        IP     K       0FL0   03      02     PE     RC
      QC     0E18    1SA     1E18    1TF    QC      .    02 .
      0SA    TX      AK       04     RC      0E18    1SA     1E18   1TF    QC
      .   03 .       .        .       .      .       .       .      .
      ------------------------------------------------------------------------
      1SA    D       IP       K      0FL0    PE      QC      0E18   1SA    1E18
      1TF    QC      .     03 .       .       .       .       .      .      .
      0SA    TX      AK       CL2    0E18    1SA     1E18    1TF    QC     .    04
      1SA    CL5     D        IP     K       0FL0    04      PE     QC     0E18
      1SA    1E18    1TF      QC     .    04 .
      0SA    C7      C6       C4     E       K       06      02     T0     0E18
      1SA    1E18    1TF      QC     .    05 .
      1SA    C5      05       03     QC      0E18    1SA     1E18   1TF    QC
      .   05 .       .        .       .      .       .       .      .       .

629   0SA    C7      C6       C4     E       IP      K       06     05     T0
      0E18   1SA     1E18     1TF    QC      .    06 .        .      .      .
      1SA    C5      03       02     QC      0E18    1SA     1E18   1TF    QC
      .   06 .       E        K       06      05     04     02     0E18   1SA
      0SA    T0      E        K    07 06      05      04      02     0E18   1SA
      1E18   1TF     QC      .    07 .         .       .      .      .
      1SA    IP      03       QC     0E18    1SA     1E18    1TF    QC     .    07

630   QC and test, one side.
      1SA    CL2     E        0FL0   PE      QC      RC      0E18   1SA    1E18
      0TF    QC      .     01 KSU0    .       .       .       .      .      .
      1SA    AK      D        K      0FL0    05      03      02     PE     QC
      0E18   1SA     1E18     0TF    QC      .    01 05      .   02 054    05A
      05     .    03 KIO      AK      .       .       .       .      .      .
      1SA    AK      D        K      0B3     0FL0    03      02     PE     QC
      0E18   1SA     1E18     0TF    QC      .    01 0B3     .   02 0B3    .    03
      KIO    AK      .
      1SA    AK      D        IP     K       0FL0    02      PE     QC     0E18
      1SA    1E18    0TF      QC     .    01 IP      .    02 032-   03-    .    03
      KIO    AK      .
      1SA    E       0FL0     03     02      PE      QC      RC     0E18   1SA
      1E18   0TF     QC      .    02 KSU0    .       .       .       .      .
      1SA    AK      D        IP     K       0FL0    05      03     02     PE
      QC     0E18    1SA     1E18    0TF    QC      .    01 IP      .   04 KIO
      AK     .    02 054      04A    04      .       .       .       .      .
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Tape stops	Marker number

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631   1SA   AK    D     IP          K     OFLO        PE    QC          OE18   1SA
      1E18  OTF   QC    .     02   032-   .     01   IP    .     03   KIO    AK
      1SA   TO    C7    C6          C4    E           OB3   OFLO        06    PE
      QC    OE18  1SA   1E18        OTF   QC          .     03   KIO
      1SA   CL5   D     K           OFLO  03          02    PE          QC     RC
      0E18  1SA   1E18  OTF         QC    .     03   RC    .     01   KSUO   AKA-
      AK-   .     02 KSUO  AKA-     AK-   .     04   04-   .          KSUO   AKA-
      1SA   CL2   D     K           OFLO  04          PE    QC          OE18   1SA
      1E18  OTF   QC    .     03   04     .     01   KSUO  AKA-        AK-    .
      1SA   TO    CL5   C7          C6    C4          E     OB3         OFLO   06
      04    PE    QC    OE18        1SA   1E18        OTF   QC          .     04 KIO
      1SA   CL5   CL2   D           K     OFLO  04    PE    QC          OE18
      1SA   1E18  OTF   QC          .     04 CL2      .     01   KSUO   AKA-   AK-
      .     03 04       .           .     .           .     .           .      .

632   1SA   D     K     OFLO        04    PE          QC    OE18        1SA    1E18
      OTF   QC    .     04    CL5-   .     01   KSUO  AKA-  AK-         .     03 04
      1SA   CL5   C5    D           K     04          03    02    QC          OE18
      1SA   1E18  OTF   QC          .     04   ERR-   .     05    OW          .     06 ORB
      K065  K     .     .           .     .           .     .
      1SA   TX    CL5   C5          D     K           OFLO  04    03          02
      PE    QC    OE18  1SA         1E18  OTF         QC    .     04   TXC    .     05
      OW    .     06 ORB  K065      K     .           .     PE    QC          OE18   1SA
      1SA   AK    C5    D           OFLO  02          PE    QC    OE18        1SA
      1E18  OTF   QC    .     06   ORB    03-         .     01   KSUO  KED2   K-
      1SA   C5    D     IP          OFLO  PE          QC    OE18  1SA         1E18
      OTF   QC    .     07    OEL    03-   .     03   KIO   K-          .     1SA   1E18  OTF
      1SA   OFLO  05    03          PE    QC          OE18  1SA         1E18   OTF
      QC    .     03 KIO    .     05 CNU6  C5A-       C5-   .     07   OEL    K065
      05    .           .           .     .           .     .           .      .
      1SA   C6    C5    IP          OFLO  05          03    PE          QC     OE18
      1SA   1E18  OTF   QC          .     03   KIO    .     05   CNU6   C6     .
      .     07 OEL   K065           05    .           .     .           .      .

633   1SA   TX    C7    C6          C4    E           IP    OB3         06     QC
      RC    OE18  1SA   1E18        OTF   QC          .     07   OEL     OE18   1SA   1E18
      1SA   AK    D     OFLO        03    PE          QC    OE18        1SA    1E18
      OTF   QC    .     07    IP-    .     01   KSUO  KED2  K-          PE     .     QC   OE18
      1SA   CL5   D     IP          OFLO  04          03    PE          QC     OE18
      1SA   1E18  OTF   QC          .     07   04     .     04   KIO    K-     .
      1SA   TO    D     IP          OFLO  03          PE    QC          OE18   1SA
      1E18  OTF   QC    .     07   TOB    .     03   KIO   K-           .      .
      1SA   C7    C5    OFLO        05    04          03    PE          QC     OE18
      1SA   1E18  OTF   QC          .     04   KIO    .     05   CNU6   C7     .     05
      1SA   05    QC    OE18        1SA   1E18        OTF   QC          .     05 OW
```

```
03A-    03-      .      06  ORB   .        .        .        .           .        .
1SA     C5       C4     IP        05       03       02       QC       07 0E18     1SA
1E18    OTF      QC     .     05  C4       .     06  C4       .     07 0EL        02
1SA     C7       IP     03        02       QC       0E18     1SA        1E18      OTF
QC      .     06  CNU6  .     07  0EL      02       .        .          .        .
```

634   QC or test, zero side. Logic for zero side QC is on board 331.
```
0SA     QC       TP     0E18      0SA      1E18     OTF         QC       .     01  .
1SA     0E18     0SA    1E18      OTF      QC       .        01 .        .         .
```

635   QC and test, zero side.
```
1SA     TP       0E18   0SA       1E18     1TF      QC          .     01  TP        .
```

636   QP or test, one side. Logic for one side QP is on boards 338, 339, 439.
```
0SA     QX       0E18   1SA       1E18     1TF      QP          .     01  .         .
1SA     T0       TX     QC        TP       QP       0E18        1SA      1E18      1TF
QP      .     01  .      .         .        0E18     1SA        1E18     1TF       QP        .    02
0SA     K        MN     QC        0E18     1SA      1E18        1TF      QP        .         02
1SA     TX       TP     QP        0E18     1SA      1E18        1TF      QP        .         02
0SA     TX       D      04        0E18     1SA      1E18        1TF      QP        .         03
1SA     AK       E      ID        LX       MN       QX          QP       0E18      1SA
1E18    1TF      QP     .     03  .        .        .           .        .         .
0SA     LX       QC     0E18      1SA      1E18     1TF         QP       .     04  .
1SA     TX       K      TP        QP       0E18     1SA         1E18     1TF       QP
.    04 .        .      .         TP       0E18     1SA         1E18     1TF       QP        .    05
0SA     E        QC     TP        0E18     1SA      1E18        1TF      QP        .         05
1SA     TX       AK     D         K        04       QP          0E18     1SA       1E18
1TF     QP       .   05 .         TP       0E18     1SA         1E18     1TF       QP        .    06
0SA     AK       QC    
```

637
```
1SA     TX       ID     K         QX       QP       0E18        1SA      1E18      1TF
QP      .     06  .      .         .        0E18     1SA         1E18     1TF       QP
0SA     AK       ID     QX        TP       0E18     1SA         1E18     1TF       QP
.    07 .        .      .         .        .        .           .        .         .
1SA     TX       K      QC        QP       0E18     1SA         1E18     1TF       QP
.    07 .        .      .         .        .        .           .        .         .
```

Tape   Marker
stops   number

638   QP and test, one side.
        1SA   TO   TX   QC   QX   TP   QP   03 0E18   1SA   1E18
        OTF   QP   .   01 QX   .   02 QC   .   TXC   TX   .
        1SA   TO   TX   LX   MN   TP   QP   0E18   1SA   1E18
        OTF   QP   .   01 QC-   .   02 MNA   MN   03 .   TXC   TX
        1SA   TX   ID   QC   TP   QP   0E18   1SA   1E18   OTF
        QP   .   01 TPO-   .   02 QC   .   03 TXC   TX
        1SA   TO   TX   MN   TP   QP   0E18   1SA   1E18   OTF
        QP   .   02 MNA   .   01 QC-   .   03 TXC   TX   .   04 KB-
        K-   .   .   .   .
        1SA   TO   TX   AK   D   K   LX   04   TP   QP
        0E18   1SA   1E18   OTF   QP   .   02 KB   .   01 QC-   .   03
        TXC   TX   .   04 LX   .   05 TP   .   .   .
        1SA   TX   AK   D   04   QP   0E18   05 1SA   1E18   OTF
        QP   .   02 .   TP-   .   03 TXC   TX   .   05 KSUO   KED2   .
        K-   .   .   .   .

639   1SA   TX   AK   E   ID   LX   MN   QC   TP   QP
        0E18   1SA   1E18   OTF   QP   .   03 TXC   .   02 MNA   MN
        1SA   TO   TX   MN   TP   QP   0E18   1SA   1E18   OTF
        QP   .   04 KB-   .   01 QC-   .   02 MNA   MN   .   03 TXC
        TX   .   .   .   .
        1SA   TX   K   QC   QX   TP   QP   0E18   1SA   1E18
        OTF   QP   .   04 QC   .   03 TXC   TX   .   .   .
        1SA   TX   AK   E   ID   K   QX   QP   0E18   06 1SA
        1E18   OTF   QP   .   04 TP-   .   03 TXC   TX   .   06 KAK1
        AK   .   .   .   .
        1SA   TX   AK   E   ID   04   QX   QP   0E18   1SA
        1E18   OTF   QP   .   05 KSUO   .   02 TP-   .   03 TXC   TX
        1SA   TO   TX   AK   D   K   04   QC   QP   0E18
        1SA   1E18   OTF   QP   .   05 QC   .   01 TPO-   TP-   .   03
        TXC   TX   .   07 KAK1   AK   .   .   .   .

640   1SA   TX   05 AK   D   03 K   QP   0E18   04 1SA   1E18   06 OTF
        QP   .   05 04-   .   03 TXC   TX   .   04 TP-   .   06 KAK1
        AK   .   07 KAK1   AK
        1SA   TX   AK   E   ID   QX   QP   0E18   1SA   1E18
        OTF   QP   .   06 KAK1   .   02 TP-   .   03 TXC   TX
        1SA   TX   ID   K   QC   QX   QP   0E18   1SA   1E18
        OTF   QP   .   06 QC   .   03 TXC   TX   .   .   .
        1SA   TO   TX   K   LX   TP   QP   0E18   1SA   1E18

```
        OTF     QP          .    06  TP      .    01  QC-     .        02  KB      K       .     03
        TXC     TX          .    04  LX      E    07  TP      .            .       .       .
        1SA     TO      TX       AK      E        QC      QP           OE18    1SA     1E18
        OTF     QP·         .    07  KAK1    .    01  TPO-    TP-          .   03  TXC     TX
        1SA     TX      K        QC      QX       QP      OE18         1SA     1E18    OTF
        QP      .   07  QX          .    03  TXC    TX       .       06  QC      .       .

641     1SA     TO      TX       ID      K        QC      QP           OE18    1SA     1E18
        OTF     06  QP      .    07  ID      .    01  TPO-    TP-          .   03  TXC     TX
        .   06  QC          .        .       .        .       .            .       .       .

642     QP or test, zero side.  Logic for zero side QP is on boards 338, 439.
        OSA     ID      QP       OE18    OSA      1E18    OTF     QP           .   01  .
        1SA     TO      TX       QC      QX       OE18    OSA     1E18    OTF     QP
        .   01  .           .        .            .       1E18    OTF     QP       .
        OSA     K       QC       QP      OE18     OSA     1E18    OTF     QP       .     02
        1SA     TO      MN       TP      OE18     OSA     1E18    OTF     QP       .     02
        OSA     TO      AK       D       ID       LX      MN      QP      OE18     OSA
        1E18    OTF     QP       .   03  .            .       .       .        .
        1SA     E       04       OE18    OSA      1E18    OTF     QP           .   03  .
        OSA     QC      QP       OE18    OSA      1E18    OTF     QP           .   04  .
        1SA     TO      K        LX      TP       OE18    OSA     1E18    OTF     QP
        .   04  .           .        .            .       .       .        .
        OSA     E       05  04   QC      TP       QP      OE18    OSA     1E18    OTF
        QP      .   05  .           .        .       OE18    OSA     1E18    OTF     QP
        1SA     TO      AK       D       K        OE18    OSA     1E18    OTF     QP
        .   05  .           .        .            .       .       .        .
        OSA     TX      QX       TP      QP       OE18    OSA     1E18    OTF     QP
        .   06  .           .        .            .       .       .        .
        1SA     TO      ID       K       QC       OE18    OSA     1E18    OTF     QP
        .   06  .           .        .            .       .       .        .

643     QP and test, zero side.
        1SA     TO      TX       MN          QC       TP           OE18    OSA     1E18    1TF
        QP      .   01  QX-         .    02  QC       .     03  TOB     TO          .       OSA     1E18
        1SA     TO      TX       E           04       QX       TP       OE18    OSA     1E18
        1TF     QP      .   01  QC-         .    02  MNA-    MN-          .   03  TOB     TO
        1SA     TO      MN       QC          QX       TP           OE18    OSA     1E18    1TF
        QP      .   01  TOX-        .    02  QC       .     03  TOB     TO          .       .
        1SA     TO      TX       LX          QX       TP           OE18    OSA     1E18    1TF
        QP      .   02  MNA-        .    01  QC-      .     03  TOB     TO          .    04  KB-
        K-      .           .           .        .            .       .        .
        1SA     TO      TX       AK      D        K        MN       QX       TP       OE18
        OSA     1E18    1TF      QP          .    02  KB       .     01  QC-         .   03  TOB
        TO      .   04  LX-         .    05  TP       MN       QX       OE18    OSA     1E18
        1SA     TO      TX       AK      D            MN       QX           OE18    OSA     1E18
        1TF     QP      .    02  TP-         .    01  QC-      .     03  TOB     TO          .     05
        KSU0    KED2    K-          .        .            .       .        .
```

Tape stops | Marker number

```
644   1SA        TO         E          04    TP         0E18       OSA        1E18       1TF        QP
      .      03  TOB        .      02  MNA-       MN-        .          .          .          .
      1SA        TO         TX         LX    QX         TP         0E18       OSA        1E18       1TF
      QP         .      04  KB-        .      01  QC-        .      02  MNA-       MN-        .      03  TOB
      TO         .          .          .     .          .          .          .          .
      1SA        TO         ID         K     LX         QC         TP         0E18   06  OSA        1E18
      1TF        QP         .      04  QC         .      03  TOB        TO         .      06  TP         .
      1SA        TO         TX         E     ID         K          LX         04    QX         03  0E18
      OSA        1E18       1TF        QP    .      04  TP-        .      01  QC-        .      03  TOB
      TO         .      06  QC-        .     .          .          .          .          .
      1SA        TO         TX         E     MN         QX         0E18       OSA        1E18       1TF
      QP         .      05  KSU0       .      01  QC-        .      02  TP-        .      03  TOB        TO
      1SA        TO         AK         D     K          QC         0E18       OSA        1E18       1TF
      QP         .      05  QC         .      03  TOB        TO         .      06  ID         .          .

645   1SA        TO         TX         AK    D          ID         K          LX         04         QX
      0E18       OSA        1E18       1TF   QP         .      05  04         .      01  QC-        .      03
      TOB        TO         .      04  TP-        .      06  QC-        .          .          .          .
      1SA        TO         ID         QC    0E18       OSA        1E18       1TF        QP         .      06
      KB-        .      03  TOB        TO    .          .          .          .          .          .

646   QX or test, one side.  Logic for one side QX is on boards 335, 334.
      OSA        Q0         0E18       1SA   1E18       1TF        QX         .      01  .          .
      1SA        QX         0E18       1SA   1E18       1TF        QX         .      01  .          .

647   QX and test, one side.
      1SA        QX         Q0         0E18  1SA        1E18       OTF        AX         .      01  Q0

648   QX or test, zero side.  Logic for zero side QX is on board 334.
      OSA        QX         0E18       OSA   1E18       OTF        QX         .      01  .          .
      1SA        Q0         0E18       OSA   1E18       OTF        QX         .      01  .          .

649   QX and test, zero side.
      1SA        0E18       OSA        1E18  1TF        QX         .      01  Q0-        .          .

650   RC or test, one side.  Logic for one side RC is on board 326.
      OSA        TO         AK         CL2   04         0E18       1SA        1E18       1TF        RC
      .      01  .          .          .     .          .          .          .          .          .
      1SA        CL5        D          K     RC         0E18       1SA        1E18       1TF        RC
      .      01  .          .          .     .          .          .          .          .          .
      OSA        TO         AK         IP    0E18       1SA        1E18       1TF        RC         .      02
      1SA        D          K          ND    04         RC         0E18       1SA        1E18       1TF
      RC         .      02  .          .     .          .          .          .          .          .
```

```
OSA     TO         C7     C6     E         K       06      OE18    1SA     1E18
RC         .   03   .      .      .         .       .        .      .       .
1SA     C5         C4     05     03       RC      OE18    1SA     1E18    1TF
RC         .   03   .      .      .         .       .        .      .       .
OSA     TO         C7     C6     E         K       06      05      OE18    1SA
1E18    1TF       RC     .  04  .         .       .        .      .       .
1SA     C5         C4     03     02       RC      OE18    1SA     1E18    1TF
RC         .   04   .      IP     K         .       06      05      04      02      OE18
OSA     TO         E      IP     K      05 06      05      04      02      OE18
1SA     1E18      1TF    RC     .      05 1SA
1SA     03         RC     OE18   1SA     1E18    1TF  .   RC      .   05   .
```

651 RC and test, one side.

```
1SA     AK         CL5    C7     C6         E       IP       06      RC      OE18
1SA     1E18      OTF    RC     .   01  KIO       .        .       .       .
1SA     C5         C4     D      K         ND      05   03  03      RC      OE18
1SA     1E18      OTF    RC     .   01  CL5-      .   02  04-     .   03  OW
K06     K          .      .      .         .       .        ND      .       .
1SA     CL5        CL2    C5     C4        D       K        ND      05      03
RC         OE18    1SA    1E18   OTF       RC      .   01  CL2     .   02  04-
.   03  OW         K06    K      D         IP      K        05      04      03
1SA     CL5        C5     C4     D         IP      K        05      04      03
RC         OE18    1SA    1E18   OTF       RC      .   01  04      .   03  OW
K06     K          .      .      .         .       ND       .       .       .
1SA     AK         C7     C6     E         IP   02 ND       06      04      RC
OE18    1SA        1E18   OTF    RC        .    02 KIOP     .        03      RC
1SA     CL5        C5     C4     D         K        05      04   01  03      RC
OE18    1SA        1E18   OTF    RC        .    02 ND-      .    01 04      .   03
OW      K06        K      .      .         .       .        .       .       .
```

652

```
1SA     AK         CL2    C5     C4        E       IP       06      RC      OE18
1SA     1E18      OTF    RC     .   03  OW        05       03      RC      OE18
1SA     CL5        C7     C6     C4        D        .       01  KIO     K-      .   05
1SA     1E18      OTF    RC     .   03  CNU6      .        01  KIO     K-      .   05
OEL     K065       05     .      .         .        .        .       .       .
1SA     CL5        C5     D      05        03      RC       OE18    1SA     1E18
OTF     RC         .   03 C4-    .   01  KIO     K-       .   05  OEL     K065
05         .        .      .      .         E        .        .       .       .
1SA     AK         CL2    C5     C4        E       IP    ,  06      RC      OE18
1SA     1E18      OTF    RC     .   04  ORB       .        .       .       .
1SA     CL5        C7     C6     C4        D       03       02      RC      OE18
1SA     1E18      OTF    RC     .   04  CNU6      .        01  KIO     K-      .   05
OEL  02 .          .      .      .         .        .        .       .       .
1SA     CL5        C5     D      03        02      RC       OE18    1SA     1E18
OTF     RC         .   04 C4-    .   01  KIO     K-       .   05  OEL     02
```
```

| Tape stops | Marker number |
|---|---|

653

| 1SA | AK | CL2 | C7 | | C6 | E | | 06 | RC | | 0E18 | 1SA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1E18 | OTF | RC | . | 05 | OEL | . | | . | . | | . | . | |
| 1SA | CL5 | C5 | C4 | | D | IP | | 03 | RC | | 0E18 | 1SA | |
| 1E18 | OTF | RC | . | 05 | IP | . | 01 | KIO | K- | | . | 03 | OW |
| 05A- | 05- | . | 04 | ORB | 032- | 02- | | | 03 | | | | |
| 1SA | C5 | C4 | D | | ND | 04 | | 03 | RC | | 0E18 | 1SA | |
| 1E18 | OTF | RC | . | 05 | 04 | . | 02 | KIOP | KIO | K- | | . | 03 |
| OW | 05A- | 05- | . | 04 | ORB | 032- | 02- | | . | | . | | |
| 1SA | TO | 03 | RC | | 0E18 | 1SA | 1E18 | | OTF | | RC | . | 05 |
| TOB | . | . | . | | . | . | . | | . | | . | . | |

654

RC or test, zero side. Logic for zero side RC is on board 326.

| 0SA | TX | RC | 0E18 | OSA | 1E18 | OTF | | RC | | . | 01 | . |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1SA | 0E18 | OSA | 1E18 | OTF | RC | . | 01 | . | | . | | . |

655

RC and test, zero side.

| 1SA | TX | 0E18 | 1SA | 1E18 | 1TF | RC | | . | 01 | TXC | | . |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

656

RP or test, one side. Logic for one side RP is on boards 337, 437.

| 0SA | RX | 0E18 | 1SA | 1E18 | 1TF | RP | | . | 01 | . | | . |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1SA | TO | TX | RC | RP | 0E18 | 1SA | 1E18 | 1TF | | RP | | |
| . | 01 | . | . | . | . | . | . | . | | . | | |
| 0SA | K | MN | 04 | RC | 0E18 | 1SA | 1E18 | 1TF | | RP | | |
| . | 02 | . | . | . | . | . | . | . | | . | | |
| 1SA | TX | RP | 0E18 | 1SA | 1E18 | 1TF | RP | . | 02 | . | | |
| 0SA | MN | RC | 0E18 | 1SA | 1E18 | 1TF | RP | . | 03 | . | | |
| 1SA | TX | K | 04 | RP | 0E18 | 1SA | 1E18 | 1TF | | RP | | |
| . | 03 | . | . | . | . | . | . | . | | . | | |
| 0SA | NX | 04 | RC | 0E18 | 1SA | 1E18 | 1TF | RP | | . | 04 | |
| 1SA | TX | K | RP | 0E18 | 1SA | 1E18 | 1TF | RP | | . | 04 | |
| 0SA | TO | TX | 0E18 | 1SA | 1E18 | 1TF | RP | . | 05 | . | | |
| 1SA | MN | NX | RX | RP | 0E18 | 1SA | 1E18 | 1TF | | RP | | |
| . | 05 | . | . | . | . | . | . | . | | . | | |

657

RP and test, one side.

| 1SA | TO | TX | | 04 | . | RC | | RX | RP | | 0E18 | 1SA | | 1E18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OTF | RP | . | 01 | RX | . | 02 | RC | . | 03 | RC | . | 05 | TXC | |
| TX | . | . | | . | | . | | . | . | | . | . | | . |
| 1SA | TO | TX | | MN | NX | 04 | | RP | 0E18 | | 1SA | 1E18 | | |
| OTF | RP | . | 01 | RC- | . | 02 | MNA | MN | . | 03 | MNA | MN | | |
| . | 05 | TXC | TX | . | . | . | | . | . | | . | . | | |
| 1SA | TX | 04 | | RC | RP | 0E18 | | 1SA | 1E18 | | OTF | RP | | |
| . | 01 | TOA- | . | 02 | RC | . | 03 | RC | . | 05 | TXC | TX | . | |

```
1SA      TO        TX       MN       04       RP       0E18     1SA      1E18     OTF
RP       .    02   MNA      .    01  RC-      .    03   MNA      MN       .    05  TXC
TX       .         .        .        .        .        .        .        .        .
1SA      TO        TX       K        NX       RP       0E18     1SA      1E18     OTF
RP       .    02   KB       .    01  RC-      .    03   04-      .    04  NX       .    05
TXC      TX        .        .        .        .        .        .        .        .
1SA      TO        TX       MN       04       RP       0E18     1SA      1E18     OTF
RP       .    03   MNA      .    01  RC-      .    02   MNA      MN       .    05  TXC
TX       .         .        .        .        .        .        .        .        .

658  1SA      TX        K        RC       RX       RP       0E18     1SA      1E18     OTF
     RP       .    04   RC       .    05  TXC      TX       .        .        .        .
     1SA      TO        TX       MN       RP       0E18     1SA      1E18     OTF      RP
     .    04  KB-       .    01  RC-      .    02   MNA      MN       .    05  TXC      TX
     1SA      TO        TX       K        MN       04       RP       0E18     1SA      1E18
     OTF      RP        .    04  04       .    01  RC-      .    03   MNA      MN       .    05
     TXC      TX        .        .        .        .        .        .        .        .
     1SA      TX        MN       NX       04       RX       RP       0E18     1SA      1E18
     OTF      RP        .    05  TXC      .    02   MNA      MN       .    03   MNA      MN

659  RP or test, zero side.  Logic for zero side RP is on boards 336, 337, 338, 437.
     OSA      RP        0E18     OSA      1E18     OTF      RP       .    01  .        .
     1SA      TO        TX       RC       RX       0E18     OSA      1E18     OTF      RP
     .    01  .         04       RC       RP       0E18     OSA      1E18     OTF      RP
     OSA      K         .        .        .        .        .        .        .        .
     .    02  .         .        .        .        .        .        .        .        .
     1SA      TO        TX       MN       0E18     OSA      1E18     OTF      RP       02
     OSA      RC        RP       0E18     OSA      1E18     OTF      RP       .    03  .
     1SA      TO        TX       K        MN       04       0E18     OSA      1E18     OTF
     RP       .    03   .        .        .        .        .        .        .        .
     OSA      04        RC       RP       0E18     OSA      1E18     OTF      RP       .    04
     1SA      TO        TX       K        NX       0E18     OSA      1E18     OTF      RP
     .    04  .         .        .        .        .        .        .        .        .
     OSA      TO        TX       MN       NX       RX       RP       0E18     OSA      1E18
     OTF      RP        .    05  .        .        .        .        .        .        .
     1SA      0E18      OSA      1E18     OTF      RP       .    05  .        .        .
```

Tape stops	Marker number									

660 RP and test, zero side.

```
660   RP and test, zero side.
      1SA     TO      TX      MN          04      RC          0E18    OSA         1E18    1TF
      RP      .   01  RX-     .       02  RC      .       03  RC      .       05  TOB     TO
      1SA     TO      TX      04          RX      0E18    OSA     1E18    1TF             RP
      .   01  RC-     .   02  MNA-    MN-     .       03  MNA-    MN-     .       05  TOB
      TO      .       .       .       .       .       .       .
      1SA     TO      TX      04      RX      0E18    OSA     1E18    1TF             RP
      .   02  MNA-    .   01  RC-     .   03  MNA-    MN-     .   05  TOB             TO
      1SA     TO      TX      K       MN      RX      0E18    OSA     1E18    1TF
      RP      .   02  KB      .   01  RC-     .   03  04-     .   04  NX-     .   05
      TOB     TO      .       .       .       .       .       .       .
      1SA     TO      TX      04      RX      0E18    OSA     1E18    1TF             RP
      .   03  MNA-    .   01  RC-     .   02  MNA-    MN-     .   05  TOB             TO
      1SA     TO      TX      K       NX      RC      0E18    OSA     1E18    1TF
      RP      .   04  RC      .   01  RX-     .   05  TOB     TO      .       .
      1SA     TO      TX      NX      RX      0E18    OSA     1E18    1TF             RP
      .   04  KB-     .   01  RC-     .   02  MNA-    MN-     .   05  TOB             TO
```

```
661   1SA     TO      TX      K       NX      04      RX      0E18    OSA     1E18
      1TF     RP      .   04  04      .   01  RC-     .   03  MNA-    MN-     .   05
      TOB     TO      .       .       .       .       .       .       .
      1SA     TO      K       NX      0E18    OSA     1E18    1TF     RP      .   04
      TXA-    .   05  TOB     TO      .       .       .       .       .
      1SA     TO      0E18    OSA     1E18    1TF     RP      .   05  TOB     .
```

```
662   RX or test, one side.  Logic for one side RX is on boards 326, 329.
      OSA     RO      0E18    1SA     1E18    1TF     RX      .   01  .       .
      1SA     RX      0E18    1SA     1E18    1TF     RX      .   01  .       .
```

```
663   RX and test, one side.
      1SA     RX      RO      0E18    1SA     1E18    OTF     RX      .   01  RO
```

```
664   RX or test, zero side.  Logic for zero side RX is on boards 326, 329.
      OSA     RX      0E18    OSA     1E18    OTF     RX      .   01  .       .
      1SA     RO      0E18    OSA     1E18    OTF     RX      .   01  .       .
```

```
665   RX and test, zero side.
      1SA     0E18    OSA     1E18    1TF     RX      .   01  RO-     .       .
```

```
666   TSO or test, one side.  Logic for one side TSO is on board 332.
      OSA     B6      B5      B3      B2      0E18    1SA     1E18    1TF     TSO
      .   01  .       .       .       .       .       .       .       .
      1SA     B1      TSO     0E18    1SA     1E18    1TF     TSO     .   01  .
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Tape stops	Marker number

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      679    TO and test, one side.
             1SA    TO       TX       AK      B2      D       OE18    1SA     1E18    OTF
             TO     .    01  TXS      .       .       .       .       .       .       .
             1SA    TO       TX    02 B2      D       E       S       OE18    1SA     1E18
             OTF    TO       .     02 KD1     .       .       .       .       .       .
             1SA    TO       TX       B2      K       S       OE18    1SA     1E18    OTF
             TO     .    02  E-       .       .       .       .       .       .
             1SA    TO       TX       AK   02 B2      E       K       S       OE18    1SA
             1E18   OTF      TO       .    02 AKA     .       .       OE18    1SA     1E18    OTF
             1SA    TO       TX       B2      E       K       OE18    1SA     1E18    OTF
             TO     .    02  S-       .       .       .       .
             1SA    TX       B2       E       K       S       OE18    BSC     TO      1E18
             OTF    TO       .     02 TO-     .       .       .       .       .       .       .

      680    TO or test, zero side.  Logic for zero side TO is on boards 337, 339.
             OSA    TO       OE18     OSA     1E18    OTF     TO      .    01  .       .
             1SA    OE18     OSA      1E18    OTF     TO      .    01  .       .       .

      681    TO and test, zero side.
             1SA    TO       OE18     BSC     TO      OE18    1TF     TO      .    01  TOA

      682    XC or test, one side.  Logic for one side XC is on boards 315, 316, 317.
             OSA    TO       D        OE18    1SA     1E18    1TF     XC      .    01  .
             1SA    ID       XC       OE18    1SA     1E18    1TF     XC      .    01  .
             OSA    TO       AK       CL7     IP      OE18    1SA     1E18    1TF     XC
             .   02 .        .        .       .       .       .       .       .
             1SA    D        E        K       XC      OE18    1SA     1E18    1TF     XC
             .   02 .        .        .       .       .       .       .       .       .
             OSA    TO       AK       OB4     OB2     05      OE18    1SA     1E18    1TF
             XC     .    03  .        .       .       .       .       .       .
             1SA    DSP      D        E       IP      K       OB3     XC      OE18    1SA
             1E18   1TF      XC       .    03 .       .       .       .       .       .
             OSA    AP       K        MC      OE18    1SA     1E18    1TF     XC      .    04
             1SA    TO       TX       AC      D       XC      OE18    1SA     1E18    1TF
             XC     .    04  .        .       .       .       .       .       .
             OSA    AC       AP       K       OE18    1SA     1E18    1TF     XC      .    05
             1SA    TO       TX       D       MC      XC      OE18    1SA     1E18    1TF
             XC     .    05  .        .       .       .       .       .
             OSA    AC       C4       K       MC      OE18    1SA     1E18    1TF     XC
             .   06 .        .        .       .       .       .       .       .
             1SA    TO       TX       D       XC      OE18    1SA     1E18    1TF     XC
             .   06 .        .        .       .       .       .       .       .

      683    OSA    E        OE18     1SA     1E18    1TF     XC      .    07  .       .
             1SA    AK       D        K       05      XC      OE18    1SA     1E18    1TF
             XC     .    07  .        .       .       .       .       .       .
```

```
684    XC and test, one side.
       1SA       E          K         XC        OE18      1SA       1E18      OTF       XC        .      01
       ID-       .      02 KIOC       KIO       D-        .         .         OB4       OB2       XC        OE18
       1SA       CL7        D         E         ID    01 K         .      02 KIOC      CL7        XC
       1SA       1E18       OTF       XC        .     01 D         .      02 KIOC      CL7        1E18
       1SA       TO         TX        AC        ID        MC        XC        OE18      1SA       1E18
       OTF       XC         .      01 TOB       .         .         .      02 IPO       .         .      02
       1SA       CL7        E         XC        OE18      1SA       1E18      OTF       XC        .      02
       KIOC      .      01 ID-       .         .         .         .         .         .         .
       1SA       TO         TX        AC        D         E         K         MC        OB4       OB2
       XC        OE18       1SA       1E18      OTF       XC        .      02 IPO       .         OTF
       1SA       D          ID        K         05        XC        OE18      1SA       1E18      OTF
       XC        .      02 E-        .      01 D         .      07 KSUO      AKA-      AK-       .
       1SA       CL7        DSP       D         E         ID        K         OB3       XC        OE18
       1SA       1E18       OTF       XC        .      03 IP-       .      01 D         .      02 KIOC
       CL7       .          .         .         .         .         .         .         .         .

685    1SA       IP         OB4       OB2       XC        OE18      1SA       1E18      OTF       XC
       .      03 OSHB       .      01 ID-       .         .         .         .         .         .
       1SA       DSP        D         E         ID        IP        K         OB3       05        XC
       OE18      1SA        1E18      OTF       XC        .      03 05        .      01 D         .      02
       IPO       IP         .         .         .         .         .         .         .         .
       1SA       TO         TX        AC        DSP       D         E         IP        K         MC
       OB3       XC         OE18      1SA       1E18      OTF       XC        .      03 TOB       .
       1SA       TO         TX        AC        AK        AP        D         MC        05        XC
       OE18      1SA        1E18      OTF       XC        .      04 AP        .      05 AP        .      07
       KSUO      KED2       K-        .         .         .         .         .         .         .
       1SA       TO         TX        AK        C4        D         05        XC        OE18      1SA
       1E18      OTF        XC        .      04 AC-       .      05 MC-       .      06 C4        .      07
       KSUO      KED2       K-        .         .         .         .         .         .         .
       1SA       TO         TX        AC        AK        AP        D         05        XC        OE18
       1SA       1E18       OTF       XC        .      06 AC        .      04 AP        .      07 KSUO
       KED2      K-         .         .         .         .         .         .         .         .

686    1SA       TO         TX        AK        AP        D         MC        05        XC        OE18
       1SA       1E18       OTF       XC        .      06 MC        .      05 AP        .      07 KSUO
       KED2      K-         .         .         .         .         .         .         .         .
       1SA       TO         TX        E         ID        K         XC        OE18      1SA       1E18
       OTF       XC         .      06 KD2       .      01 TOB       TO        .         .         .
       1SA       D          E         ID        XC        OE18      1SA       1E18      OTF       XC
       .      06 TOX-       .      01 D         .      02 KIOC      KIO       K-        .         .
       1SA       AP         CL7       C4        E         05        XC        OE18      1SA       1E18
       OTF       XC         .      07 KSUO      .      01 ID-       .         .         .         .
       1SA       AK         D         ID        K         XC        OE18      1SA       1E18      OTF
       XC        .      07 05-       .      01 D         .         .         .         .         .
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Tape stops	Marker number										

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          687      XC or test, zero side.  Logic for zero side XC is on boards 316, 317.
                   OSA      TX      E       K       XC      0E18    OSA     1E18    OTF     XC
                   .    01  .       .       .       .       .       .       .   01  .       .
                   1SA      CL4     0E18    OSA     1E18    OTF     XC      .   01  .       .
                   OSA      CL4     XC      0E18    OSA     1E18    OTF     XC          02  .       .
                   1SA      TX      E       K       0E18    OSA     1E18    OTF     XC      .   02

          688      XC and test, zero side.
                   1SA      TX      CL4     0E18    OSA     1E18    1TF     XC      .   01  TXC
                   1SA      TX      0E18    OSA     1E18    1TF     XC      .   02  KE0     .   01
                   TXC      TX      .       E       .       .       .       .       .       .
                   1SA      TX      CL4     E       K       0E18    OSA     1E18    1TF     XC
                   .    02  CL4     .    01 TXC     TX      .       .       .       .       .
                   1SA      TX      E       ID      K       XC      0E18    BSC     XC      1E18
                   1TF      XC      .    02 XC      .    01 TXC     TX      .       .       .

          689      XP or text, one side.  Logic for one side XP is on boards 334, 335, 336, 436.
                   OSA      K       MP      0E18    1SA     1E18    1TF     XP          .   01  .
                   1SA      XP      0E18    1SA     1E18    1TF     XP          01  .       .
                   OSA      XC      0E18    1SA     1E18    1TF     XP          02  .       .
                   1SA      CL4     E       K       XP      0E18    1SA     1E18    1TF     XP
                   .    02  .       .       .       .       .       .       .       .       .
                   OSA      E       XC      IX      0E18    1SA     1E18    1TF     XP      .   03
                   1SA      K       XP      0E18    1SA     1E18    1TF     XP          03  .
                   OSA      CL4     0E18    1SA     1E18    1TF     XP          04  .       .
                   1SA      K       XC      XP      0E18    1SA     1E18    1TF     XP      .   04

          690      XP and test, one side.
                   1SA      CL4     E       MP      XP      0E18    1SA     1E18    OTF     XP
                   .    01  MP      .       .       .       .       .       .       .       .
                   1SA      CL4     E       K       XC      XP      IX      0E18    1SA     1E18
                   OTF      XP      .    01 KB      .    02 XC      .    04 CL4     .       .
                   1SA      CL4     K       XP      IX      0E18    1SA     1E18    OTF     XP
                   .    02  E-      .    01 KB      K       .    03 IX      .       .       .
                   1SA      E       K       XP      0E18    1SA     1E18    OTF     XP      .   02
                   CL4-     .    01 KB      K       .    03 E       .    04 XC-     .       .
                   1SA      CL4     K       XC      XP      0E18    1SA     1E18    OTF     AP
                   .    03  XC      .    01 KB      K       .    04 CL4     .       .       .
                   1SA      MP      XC      XP      0E18    1SA     1E18    OTF     XP      .   04
                   KB-      .    01 MP      .       .       .       .       .       .       .

          691      XP or test, zero side.  Logic for zero side XP is on boards 334, 335, 436.
                   OSA      K       XP      0E18    OSA     1E18    OTF     XP          .   01  .
                   1SA      MP      0E18    OSA     1E18    OTF     XP          01  .       .
                   OSA      CL4     XC      XP      0E18    OSA     1E18    OTF     XP      .   02
                   1SA      E       K       0E18    OSA     1E18    OTF     XP          02  .
```

```
        OSA        E        XC        XP      0E18    OSA      1E18    OTF      XP              .    03
        1SA        K        IX        0E18    OSA     1E18     OTF     XP              04       .    03    .
        OSA        XP       0E18      OSA     1E18    OTF      XP               .   04  .                  .
        1SA        CL4      K         XC      0E18    OSA      1E18    OTF      XP              .    04

692     XP and test, zero side.
        1SA        E        0E18      OSA     1E18    1TF      XP               .   01  MP-               .
        1SA        CL4      E         K       MP      0E18     OSA     1E18     1TF      XP
        .     01   KB       .    02   CL4     .    04 XC-      .                .        .                .
        1SA        K        MP        0E18    OSA     1E18     1TF     XP               .    02   E-
        .     01   KB       K         .    03 IX-     .                .        .        .                .
        1SA        E        K         MP      XC      0E18     OSA     1E18     1TF      XP
        .     02   XC       .    01   KB      K       .    04  CL4-     .                1E18     1TF
        1SA        CL4      E    03   K       MP      IX       0E18    OSA      1E18     1TF
        XP         .    03   E         .    01 KB      K       .    02  CL4      .    04  XC-
        1SA        K        MP        XC      IX      0E18     OSA     1E18     1TF      XP
        .     03   XC       .    01   KB      K       .    04  CL4-     .                .        .
        1SA        CL4      XC        0E18    OSA     1E18     1TF     XP               .    04   KB-
        .     01   MP-      .         .       .       .        .       .                .        .

693     X2 or test, one side.  Logic for one side X2 is on board 337.
        OSA        TX       DSP       X1      0E18    1SA      1E18    1TF      X2              .    01
        1SA        B2       X2        S       0E18    1SA      1E18    1TF      X2              .    01

694     X2 and test, one side.
        1SA        B2       S         0E18    BSC     X2       1E18    OTF      X2              .    01
        X2-        .        .         .       .       .        .       .        .              .
        1SA        B2       X2        X1      S       0E18     1SA     1E18     OTF      X2
        .     01   X1       .         .       .       .        .       .        .              .
        1SA        TX       DSP       X2      0E18    1SA      1E18    OTF      X2              .    01
        XCT        .        .         .       .       .        .       .        .              .

695     X2 or test, zero side.  Logic for zero side X2 is on board 337.
        OSA        TX       DSP       X2      X1      0E18     OSA     1E18     OTF      X2
        .     01   .        .         .       .       .        .       .        .              .
        1SA        B2       S         0E18    OSA     1E18     OTF     X2               .   01   .

696     X2 and test, zero side.
        1SA        B2       X2        S       0E18    BSC      X2      1E18     1TF      X2
        .     01   X2       .         .       .       .        .       .        .              .
        1SA        B2       X1        S       0E18    OSA      1E18    1TF      X2              .    01
        X1         .        .         .       .       .        .       .        .              .
        1SA        TX       DSP       0E18    OSA     1E18     1TF     X2               .   01   XCT

697     XD or test, one side.  Logic for one side XD is on boards 332, 333.
        OSA        TX       0E18      1SA     1E18    1TF      XD               .   01  .                .
        1SA        XD       S         0E18    1SA     1E18     1TF     XD               .    01   .
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Tape stops	Marker number

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698   XD and test, one side.
      1SA      XD       OE18     1SA      1E18     OTF      XD        .    01  SA-       .
      1SA      TX       XD       S        OE18     1SA      1E18     OTF      XD        .    01
      TX        .        .        .        .        .        .        .        .        .

699   XD or test, zero side.  Logic for zero side XD is on boards 332, 333.
      OSA      TO       DSP      XD       OE18     OSA      1E18     OTF      XD        .    01
      1SA      S        OE18     OSA      1E18     OTF      XD        .    01   .        .

700   XD and test, zero side.
      1SA      OE18     OSA      1E18     1TF      XD        .    01  SA-       .        .
      1SA      TO       S        OE18     OSA      1E18     1TF      XD        .    01  TOB
      1SA      DSP      S        OE18     OSA      1E18     1TF      XD        .    01  DSP

701   XR or test, one side.  Logic for one side XR is on boards 206, 328.
      OSA      D        K        TP       XC       OE18     1SA      1E18     1TF      XR
       .    01  .        .        .        .        .        .        .        .
      1SA      XR       OE18     1SA      1E18     1TF      XR        .    01   .        .
      OSA      B2       E        K        04       03       TX       OE18     1SA      1E18
      1TF      XR        .    02  .        .        .        .        .        .
      1SA      D        06       05       TP       XC       XR       OE18     1SA      1E18
      1TF      XR        .    02  .        .        .        .        .        .

702   XR and test, one side.
      1SA      D        K        XR       OE18     1SA      1E18     OTF      XR        .    01
      KD3       .        .        .        .        .        .        .        .        .
      1SA      XC       XR       OE18     1SA      1E18     OTF      XR        .    01  XC
      1SA      TP       XR       OE18     1SA      1E18     OTF      XR        .    01  TPB
      1SA      D        E        06       05       TP       XC       XR       OE18     1SA
      1E18     OTF      XR        .    02  E         .        .        .        .
      1SA      D        K        04       TP       XC       XR       OE18     1SA      1E18
      OTF      XR        .    02  OJ       05        .        .        .        .
      1SA      D        06       05       03       TP       XC       XR       OE18     1SA
      1E18     OTF      XR        .    02  03        .        .        .        .
      1SA      D        06       05       TP       TX       XC       XR       OE18     1SA
      1E18     OTF      XR        .    02  TXS      TX        .        .        .
      1SA      B2       D        06       05       TP       XC       XR       OE18     1SA
      1E18     OTF      XR        .    02  TXS      B2        .        .        .

703   XR or test, zero side.  Logic for zero side XR is on board 206.
      OSA      B6       TSO      XR       OE18     OSA      1E18     OTF      XR        .    01
      1SA      OE18     OSA      1E18     OTF      XR        .    01   .        .        .
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704     XR and test, zero side.
        1SA      B6      TS0      0E18     0SA      1E18      1TF      XR            .    01  T32

705     CLC or test, one side.  Logic for one side CLC is on boards 340, 401, 338.
        0SA      T0      CN3      C7       C5       E         K        05       04        03
        02       E1      E2       0E18     1SA      1E18      1TF      CLC           .    01  .
        1SA      TX      CN4      C6       CN2      06        TP       CLC      E3        E4
        0E18     1SA     1E18     1TF      CLC           .   01       .        .         .    .

706     CLC and test, one side.
        1SA      T0      CN4      C7       C6       E         K        CN2      05        04
        03       02      CLC      E3       E4       0E18      1SA      1E18     0TF       CLC
        .     01  0X0      .        .        .        .         .        .         .    .
        1SA      TX      CN4      CN2      06       TP        CLC      E3       E4        0E18
        1SA      1E18    0TF      CLC           .   01  C6-             .        .         .    .
        1SA      TX      CN4      C6       C5       CN2       06       TP       CLC       E3
        E4       0E18    1SA      1E18     0TF      CLC           .   01  C5              .    .
        1SA      TX      CN3      C6       06       TP        CLC      E1       E2        0E18
        1SA      1E18    0TF      CLC           .   01  CNL2            .        .         .    .

707     CLC or test, zero side.  Logic for zero side CLC is on boards 336, 340, 401, 338.
        0SA      T0      CN3      C7       C5       E         K        CN2      05        04
        03       02      CLC      E3       0E18     0SA       1E18     0TF      CLC           .    01
        1SA      TX      CN4      C6       06       TP        E1       E2       E4        PS
        0E18     0SA     1E18     0TF      CLC           .   01       .        .         .    .
        0SA      TX      CN4      C6       06       TP        CLC      E1       E2        E4
        PS       0E18    0SA      1E18     0TF      CLC           .   02       .         .    .
        1SA      T0      CN3      C7       C5       E         K        CN2      05        04
        03       02      E3       0E18     0SA      1E18      0TF      CLC           .    02  .

708     CLC and test, zero side.
        1SA      T0      CN4      C7       C6       E         K        05       04        03
        02       E1      E2       E4       PS       0E18      0SA      1E18     1TF       CLC
        .     01  0X0      .    02  *TD     PS         .        .         .        .    .
        1SA      TX      CN4      06       TP       E1        E2       E4       PS        0E18
        0SA      1E18    1TF      CLC           .   01  C6-             .    02  *TD       PS   .
        1SA      TX      CN4      C6       C5       06        TP       E1       E2            .    02  *TD
        PS       0E18    0SA      1E18     1TF      CLC           .   01  C5              .    02  *TD
        PS       .       .        .        .        .         .        .        .         .    .
        1SA      TX      CN3      C6       CN2      06        TP       E3       PS        0E18
        0SA      1E18    1TF      CLC           .   01  CNL3            .    02  *TD       PS   .
        1SA      T0      CN3      C7       C5       E         K        CN2      05        04
        03       02      E3       PS       0E18     0SA       1E18     1TF      CLC           .    02
        *TD      .       .        .        .        .         .        .        .         .
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                03
OSA    AK       B6       B3     CP7    OB2    04     OE18   1SA    1E18
1TF    PP       .   04   .      .      .      DSP    D      E      K
1SA    TO       TX       B4     B2     B1     1E18   1TF    PP     .      04
OB3    05       PP       TP     OE18   1SA    1E18   1TF    05     .
OSA    AK       OE18     1SA    1E18   1TF    PP     .   05 .      .

713    1SA   D        E        K      OB2    PP     PS     OE18   1SA    1E18
       1TF   PP       .   05   .      .      .      TP     OE18   1SA    1E18   1TF
       OSA   E        LC       OB3    05     TP     OE18   1SA    1E18   1TF
       PP    .   06   .        .      .      .
       1SA   AK       D        IP     K      04     PP     OE18   1SA    1E18
       1TF   PP       .   06   .      .      .      TP     OE18   1SA    1E18   1TF
       OSA   AK       E        IP     05     TP     OE18   1SA    1E18   1TF
       PP    .   07   .        .      .
       1SA   D        K        LC     04     PP     OE18   1SA    1E18   1TF
       PP    .   07   .        .      .
       OSA   E        IC       K      OE18   1SA    1E18   1TF    PP     .      08
       1SA   AK       CP76     D      MP     PP     OE18   1SA    1E18   1TF
       PP    .   08   .        .      .
       OSA   AK       IC       K      OE18   1SA    1E18   1TF    PP     .      09
       1SA   CP76     D        E      MP     PP     OE18   1SA    1E18   1TF
       PP    .   09   .        .      .      .      .      .      .      .      .

714    PP and test, one side.
       1SA   CP76     MP       OE18   BSC    PP     1E18   OTF    PP     .      01
       PP-   .        .        .      .      .      .      .      .      .
       1SA   CP76     PP       OE18   1SA    1E18   OTF    PP     .      01     MP-
       1SA   MP       PP       OE18   1SA    1E18   OTF    PP     .      01     CP76-
       1SA   AK       B3       CP76   D      IC     K      LC     MP            04
       PP    OE18     1SA      1E18   OTF    PP     .      01     KD3    .      07     KSU1
       AK
       1SA   CP76     MP       PP     XC     OE18   1SA    1E18   OTF    PP
       .  01 XC       .   09   PPCK   KDIC   D-
       1SA   TO       TX       B6     B4     B2     CP7    CP76   DSP    D
       E     K        MP       OB3    05     PP     TP     PS     OE18   1SA
       1E18  OTF      PP       .   02  TRS   .   03 BL4    B1-    .      05     OB2-
       .  09 PPCK     KDIC     K
       1SA   TO       TX       B6     B5     B3     CP76   DSP    D      E
       K     MP       OB3      05     PP     TP     PS     OE18   1SA    1E18
       OTF   PP       .   02   BL5    .   05 OB2-   .   09 PPCK   KDIC   K
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Tape   Marker
stops number

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715    1SA    TO     TX     B6     B4        B2     B1        CP76   DSP    D
       E      K      MP     OB3    05        PP     TP        PS     OE18   1SA
       1E18   OTF       PP     .  03 CP7-       .  04 T19     TOP    B6     .   05
       OB2-   .  09 PPCK   KDIC   K          .             .      .      .
       1SA    TO     TX     B6     B2        B1     CP7       CP76   DSP    D
       E      K      MP     OB3    05        04     PP        TP     PS     OE18
       1SA    1E18   OTF    PP     .  03 04A    .  05 OB2-    .  09 PPCK
       KDIC   K              .
       1SA    TO     TX     B6     B5        B2     B1        CP7    CP76   DSP
       D      E      K      MP     OB3       05     PP        TP     PS     OE18
       1SA    1E18   OTF    PP     .  03 TRC    .  02 BL5     B1     .   05
       OB2-   .  09 KDIC   K              .             .      .
       1SA    TO     TX     B6     B3        CP7    CP76      DSP    D      E
       K      MP     OB3    05     PP        TP     PS        OE18   1SA    1E18
       OTF    PP         .  03 BL4    .  05 OB2-    .  09 PPCK   KDIC   K


716    1SA    TO     TX     B4     B2        B1     CP7       CP76   DSP    D
       E      K      MP     OB3    05        PP     TP        PS     OE18   1SA
       1E18   OTF    PP     .  04 CP7       .  03 TRC        B6-    .   05 OB2-
       .  09 PPCK    KDIC   K
       1SA    TO     TX     B4     B2        B1     CP76      DSP    D      E
       K      MP     OB3    05     04        PP     TP        PS     OE18   1SA
       1E18   OTF    PP     .  04 04A       .  05 OB2-       .  09 PPCK   KDIC
       K      .              .
       1SA    TO     TX     B3        CP76   DSP    D         E      K      MP
       OB3    PP     TP     PS        OE18   1SA    1E18      OTF    PP     .
       .  04 T19     B4     05 OB2-   .  09 PPCK    KDIC      K
       1SA    AK            B4        B2     B1     IC        05     PP     XC     OE18
       1SA    1E18   OTF    PP        .  04 TSH     .
       1SA    TO     TX     B4        B2     B1     CP76      DSP    D      E
       K      MP     OB3    PP        TP     PS     OE18      1SA    1E18   OTF
       PP     .  04 05-    .  05 OB2-   .  09 PPCK   KDIC     K      .


717    1SA    AK     D      IC     K      LC        OB2    04         PP     XC
       OE18   1SA    1E18   OTF    PP     .    05 KOPC     .    07 KSU1   AK
       1SA    AK     E      IC     IP     04        PP     XC         OE18   1SA
       1E18   OTF    PP     .    06 KED2     .              .      .
       1SA    AK     CP76   D      IP     K         MP     PP         OE18   1SA
       1E18   OTF    PP     .    06 04A-     .              .
       1SA    AK     CP76   D      K      MP        04     PP         OE18   1SA
       1E18   OTF    PP     .    06 IP-    .    07 KSU1   AK         .      .
       1SA    AK     CP76   D      IP     K         LC     MP         04     PP
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      OE18    1SA       1E18    OTF       PP        .     06  OLTP      .      07  KSU1      AK
      1SA     AK        IC      LC        04        PP        XC        OE18       1SA       1E18
      OTF     PP        .    07 KSU1      .         .         MP        OB2        05        04      PP
      1SA     CP76      D       IP        K         MP        OB2       05         04        PP
      PS      OE18      1SA     1E18      OTF       PP        .      07 05         05      05 KOPC
      E-      .      06 OLTP    05A       05        .      09 PPCK      KDIC       K         .

718   1SA     CP76      D       K         LC        MP        OB2       PP         PS        OE18
      1SA     1E18      OTF     PP        .      07 04A-      .      05 KOPC       E-        .      09
      PPCK    KDIC      K       .         .         .         .         .          .         .
      1SA     CP76      D       K         LC        MP        OB2       04         PP        TP
      PS      OE18      1SA     1E18      OTF       PP        .      07 TPB        .      05 KOPC
      E-      .      09 PPCK    KDIC      K         .         .         .          .         .
      1SA     AK        CP76    D         E         MP        PP        OE18       1SA       1E18
      OTF     PP        .    08 E         .      01 KD3       D         .       09 AK        .
      1SA     TO        TX      B6        B5        B2        CP76      DSP        D         E
      OB3     05        PP      TP        OE18      1SA       1E18      OTF        PP        .      09
      PPCK    MP-       .       .         .         .         .         .          .         .
      1SA     TO        TX      B6        B5        B2        DSP       D          E         MP
      OB3     05        PP      TP        OE18      1SA       1E18      OTF        PP        .      09
      PPCK    CP76-     .       .         .         .         .         .          .         .
      1SA     B3        CP76    E         IC        LC        MP        PP         XC        OE18
      1SA     1E18      OTF     PP        .      09 PPCK      KDIC      .       01 XC
      1SA     MP        CP76    D         E         XC        OE18      BSC        PP        1E18
      OTF     PP        .    09 PPCK      PP-       .         .         .          .         .

719   PP or test, zero side.  Logic for zero side PP is on boards 235, 234.
      OSA     K         PP      OE18      OSA       1E18      OTF       PP         .      01 .
      1SA     TO        MP      OE18      OSA       1E18      OTF       PP         .      01 .
      OSA     TO        K       MP        PP        OE18      OSA       1E18       OTF       PP
      .    02 .         .       .         .         .         .      02 .          .         .
      1SA     OE18      OSA     1E18      OTF       PP        .         OSA        1E18      OTF
      OSA     AK        OB3     OB2       04        PP        OE18      OSA        1E18      OTF
      PP      .      03 .       .         .         .         .         .          .         .
      1SA     D         E       K         OB4       OE18      OSA       1E18       OTF       PP
      .    03 .         .       .         .         .         .         .          .         .
      OSA     D         PP      OE18      OSA       1E18      OTF       PP         .      04 .
      1SA     AK        K       TP        OE18      OSA       1E18      OTF        PP        .      04
      OSA     AK        B5      B3        OB2       PP        OE18      OSA        1E18      OTF
      PP      .      05 .       .         .         .         .         .          .         .
      1SA     TO        TX      B6        B2        B1        CP7       DSP        D         E
      K       OB3       05      04        TP        OE18      OSA       1E18       OTF       PP
      .    05 .         .       .         .         .         .         .          .         .
      OSA     AK        B6      B4        B3        OB2       04        PP         OE18      OSA
      1E18    OTF       PP      .      06 .         .         .         .          .         .
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Tape stops	Marker number												

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720    1SA      TO       TX       B5       B2       B1       DSP      D        E             K
       OB3      05       TP       OE18     OSA      1E18     OTF      PP       .        06    .
       OSA      AK       B2       B1            CP7 OB2      05       PP       OE18          OSA
       1E18     OTF      PP       .        07 .            .        .        E        .     OB3
       1SA      TO       TX       B4       B3       DSP      D        .     E        K        OB3
       TP       OE18     OSA      1E18     OTF      PP       .        07 .            .     .
       OSA      E        04       PP       TP       OE18     OSA      1E18     OTF           PP
       .     08 .             .        .             .        .        .        .        .
       1SA      D        K        OE18     OSA      1E18     OTF      PP       :        08    .

721    PP and test, zero side.
       1SA      TO       AK       CP76     MP       PP       TP       OE18     BSC           PP
       1E18     1TF      PP       .     01 PP            .     02 TO       .     04 K-            .
       1SA      TO       D        E        OB4      OE18     OSA      1E18     1TF           PP
       .     01 MP-           .     02 TO       .     03 OTR      KIOS     K-            .
       1SA      AK       B4       B3       K        MP       OB2      05       OE18          OSA
       1E18     1TF      PP       .     01 KA       .     02 KA       K        .     04 TP-
       .     08 KED2     D-            .        .        .        .        .        .
       1SA      AK       K        OB2      OE18     OSA      1E18     1TF      PP       :     01
       KA       .     04 TP-           .     08 KED2     D-            .        .        .
       1SA      TO       B4       B3       OB2      05       OE18     OSA      1E18          1TF
       PP       .     03 OTR      .     01 MP-           .     02 TO       .        .
       1SA      D        E        K        MP       OB4      04       TP       OE18          OSA
       1E18     1TF      PP       .     03 04A            .     01 KA       K        .     02 KA
       K        .     04 AK-           .        .        .        .        .        .

722    1SA      TO       TX       B6       B2       B1       DSP      D        E             K
       MP       OB3      05       04       TP       OE18     OSA      1E18     1TF           PP
       .     05 CP7-          .     01 KA       K        .     04 AK-           .     07 05
       1SA      TO       TX       B6       B2       B1       CP7      DSP      D             E
       K        MP       OB4      OB3      05       TP       OE18     OSA      1E18          1TF
       PP       .     05 04A-          .     01 KA       K        .     03 OTR      KIOS     OB3
       .     04 AK-           .     07 05       .     08 KED2     E        .        .
       1SA      TO       TX       B5       B2       B1       CP7      DSP      D             E
       K        MP       OB3      05       04       TP       OE18     OSA      1E18          1TF
       PP       .     05 TRC            .     01 KA       K        .     04 AK-           .     06 04A
       04       .     07 05       .        .        .        .        .
       1SA      TO       TX       B6       B3       CP7      DSP      D        E             K
       MP       OB3      05       04       TP       OE18     OSA      1E18     1TF           PP
       .     05 BL4            .     01 KA       K        .     04 AK-           .     07 05
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Tape stops	Marker number	

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      728     LX and test, zero side.
              1SA      TX       B2       CR4      G        NC       06       04       03       TP
              0E18     OSA      1E18     1TF      LX       .    01  LO-      .    02  TXF      TX
                  04   TXF      TX       .        .        .        .        .        .        .
              1SA      E        K        05       LO       0E18     OSA      1E18·    1TF      LX
                  01   TXP-     .        .        .        .        .        .        .        .
              1SA      B2       NC       06       04       03       02       TP       LO       0E18
              OSA      1E18     1TF      LX       .    02  CR4-     .    01  TXP-     TX-      .    03
              OD       04       .    04  G-       .        05       TP       LO       0E18     OSA
              1SA      B2       CR4      E        K        05       TP       LO       0E18     OSA
              1E18     1TF      LX       .    02  OMNF     .    01  TXP-     TX-      .    04  G-
              1SA      CR4      NC       06       04       03       0E18     OSA      1E18     1TF
              LX       .    02  TXF      .        .        .        .        .        .        .
              1SA      B2       E        K        05       02       TP       LO       0E18     OSA
              1E18     1TF      LX       .    03  OD       .    01  TXP-     TX-      .    04  G-

      729     1SA      B2       CR4      NC       06       03       TP       LO       0E18     OSA
              1E18     1TF      LX       .    03  02-      .    01  TXP-     TX-      .    02  OMNF
              OM       04-      .    04  G-       02       0E18     OSA      1E18     1TF      LX       03
              1SA      06       03       02       0E18     OSA      1E18     1TF      LX       .        03
              TXF      .        .        .        .        .        .        .        .        .
              1SA      E        G        K        05       0E18     OSA      1E18     1TF      LX
                  04   TXF      .        .        .        .        .        .        .        .
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CH	730	End of tape B. Momentarily place the SDR TAPE ADVANCE switch in the ON position, advance the tape into the takeup canister and return it to the tape cartridge.

Section IV. SPECIAL ERROR PROCEDURE

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	340	002	207		340	023	227
	340	003	224		340	024	212
	340	004	315		340	025	215
	340	005	441		340	026	212
	340	006	208		340	027	235
	340	007	232		340	028	336
	340	008	338		340	029	321
	340	009	317		340	030	230
	340	010	339		340	031	340
	340	011	233		340	032	223
	340	012	234		340	033	314
	340	013	321		340	034	231
	340	014	234		340	035	441
	340	015	335		340	036	208
	340	016	238		340	037	317
	340	017	332		340	038	218
	340	018	231		340	039	217
	340	019	233		340	040	210
	340	020	206		340	041	327
	340	021	207		340	042	333
	340	022	228		340	043	228

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	340	044	232		340	066	303
	340	045	209		340	067	302
	340	046	223		340	069	339
	340	047	318		340	070	239
	340	048	331		340	071	320
	340	049	318		340	072	226
	340	050	209		340	073	440
	340	051	235		340	074	340
	340	052	334		340	075	238
	340	053	329		340	076	218
	340	054	210		340	077	330
	340	055	333		340	078	314
	340	056	337		340	079	337
	340	057	338		340	080	213
	340	058	435		340	081	319
	340	059	435		340	082	319
	340	060	439		340	083	240
	340	061	436		340	084	237
	340	062	305		340	085	237
	340	063	311		340	086	227
	340	064	306		340	087	217
	340	065	308		340	088	328

Tape stops	Marker number	Index marker	Replace boards		Tape stops	Marker number	Index marker	Replace boards
	340	089	330			341	021	226
	340	090	229			341	022	214
	341	001	336			341	023	341
	341	002	216			341	024	223
	341	003	213			341	025	222
	341	004	240			341	026	335
	341	005	224			341	027	222
	341	006	326			341	028	329
	341	007	230			341	029	331
	341	008	211			341	030	326
	341	009	440			341	031	332
	341	010	320			341	032	316
	340	011	316			341	033	206
	341	012	315			341	034	214
	341	013	211			341	035	438
	341	014	229			341	036	438
	341	015	215			341	037	436
	341	016	239			341	038	437
	341	017	216			341	039	313
	341	018	341			341	040	312
	341	019	328			341	041	310
	341	020	327			341	042	307

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	341	043	309		341	089	328
	341	044	304		341	090	228
	341	045	301		341	091	229
	341	070	207		341	092	212
	341	071	239		341	093	216
	341	072	315		341	094	212
	341	073	226		341	095	240
	341	074	208		341	096	336
	341	075	340		341	097	326
	341	076	338		341	098	230
	341	077	218		341	099	211
	341	078	339		341	100	223
	341	079	314		341	101	320
	341	080	234		341	102	231
	341	081	213		341	103	315
	341	082	234		341	104	208
	341	083	319		341	105	229
	341	084	238		341	106	218
	341	085	237		341	107	239
	341	086	231		341	108	210
	341	087	227		341	109	341
	341	088	206		341	110	333

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	341	111	327		341	133	307
	341	112	232		341	134	303
	341	113	214		341	135	304
	341	114	334		341	137	339
	341	115	223		341	138	224
	341	116	331		341	139	320
	341	117	335		341	140	441
	341	118	209		341	141	440
	341	119	329		341	142	232
	341	120	334		341	143	238
	341	121	326		341	144	317
	341	122	210		341	145	330
	341	123	316		341	146	233
	341	124	337		341	147	337
	341	125	214		341	148	321
	341	126	435		341	149	319
	341	127	438		341	150	335
	341	128	439		341	151	240
	341	129	437		341	152	332
	341	130	305		341	153	237
	341	131	312		341	154	233
	341	132	306		341	155	217

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	341	156	207		341	178	228
	341	157	330		341	179	226
	341	158	227		341	180	209
	341	159	336		342	001	341
	341	160	215		342	002	318
	341	161	213		342	003	222
	341	162	235		342	004	318
	341	163	224		342	005	222
	341	164	321		342	006	235
	341	165	230		342	007	331
	341	166	340		342	008	329
	341	167	440		342	009	332
	341	168	314		342	010	333
	341	169	316		342	011	206
	341	170	441		342	012	338
	341	171	211		342	013	438
	341	172	317		342	014	435
	341	173	215		342	015	436
	341	174	217		342	016	436
	341	175	216		342	017	313
	341	176	327		342	018	311
	341	177	328		342	019	310

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	342	020	308		342	046	233
	342	021	309		342	047	217
	342	022	302		342	048	228
	342	023	301		342	049	229
	342	028	207		342	050	227
	342	029	239		342	051	336
	342	030	224		342	052	212
	342	031	320		342	053	240
	342	032	208		342	054	235
	342	033	340		342	055	224
	342	034	232		342	056	230
	342	035	238		342	057	211
	342	036	339		342	058	340
	342	037	314		342	059	440
	342	038	233		342	060	231
	342	039	337		342	061	315
	342	040	234		342	062	441
	342	041	319		342	063	211
	342	042	335		342	064	218
	342	043	240		342	065	239
	342	044	231		342	066	217
	342	045	227		342	067	216

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	342	068	333		342	090	311
	342	069	327		342	091	310
	342	070	228		342	092	303
	342	071	226		342	093	304
	342	072	334		342	094	302
	342	073	223		342	095	301
	342	074	318		342	097	339
	342	075	222		342	098	315
	342	076	209		342	099	226
	342	077	329		342	100	441
	342	078	235		342	101	440
	342	079	331		342	102	338
	342	080	210		342	103	218
	342	081	316		342	104	317
	342	082	333		342	105	330
	342	083	206		342	106	234
	342	084	435		342	107	213
	342	085	438		342	108	321
	342	086	435		342	109	319
	342	087	436		342	110	238
	342	088	305		342	111	237
	342	089	312		342	112	332

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	342	113	237		342	135	341
	342	114	206		342	136	327
	342	115	328		342	137	328
	342	116	207		342	138	232
	342	117	330		342	139	214
	342	118	212		342	140	209
	342	119	216		342	141	341
	342	120	215		342	142	331
	342	121	213		342	143	355
	342	122	336		342	144	318
	342	123	326		342	145	222
	342	124	321		342	146	334
	342	125	230		342	147	326
	342	126	223		342	148	329
	342	127	320		342	149	332
	342	128	314		342	150	337
	342	129	316		342	151	214
	342	130	208		342	152	338
	342	131	229		342	153	438
	342	132	317		342	154	439
	342	133	215		342	155	437
	342	134	210		342	156	438

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	342	157	313		343	023	227
	342	158	306		343	024	233
	342	159	307		343	025	217
	342	160	308		343	026	206
	343	001	309		343	027	328
	343	006	207		343	028	207
	343	007	239		343	029	330
	343	008	224		343	030	212
	343	009	320		343	031	240
	343	010	315		343	032	235
	343	011	226		343	033	224
	343	012	441		343	034	336
	343	013	440		343	035	326
	343	014	339		343	036	321
	343	015	314		343	037	230
	343	016	233		343	038	231
	343	017	337		343	039	315
	343	018	234		343	040	441
	343	019	213		343	041	211
	343	020	321		343	042	208
	343	021	319		343	043	229
	343	022	231		343	044	317

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	343	045	215		343	067	437
	343	046	333		343	068	436
	343	047	327		343	069	313
	343	048	228		343	070	303
	343	049	226		343	071	304
	343	050	232		343	072	302
	343	051	214		343	073	301
	343	052	209		343	075	339
	343	053	341		343	076	208
	343	054	209		343	077	340
	343	055	329		343	078	232
	343	056	235		343	079	238
	343	057	331		343	080	338
	343	058	334		343	081	218
	343	059	326		343	082	317
	343	060	329		343	083	330
	343	061	332		343	084	234
	343	062	435		343	085	319
	343	063	438		343	086	335
	343	064	435		343	087	240
	343	065	436		343	088	238
	343	066	439		343	089	237

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	343	090	332		343	112	210
	343	091	237		343	113	341
	343	092	228		343	114	327
	343	093	229		343	115	328
	343	094	227		343	116	334
	343	095	336		343	117	223
	343	096	212		343	118	318
	343	097	216		343	119	222
	343	098	215		343	120	331
	343	099	213		343	121	335
	343	100	230		343	122	318
	343	101	211		343	123	222
	343	102	340		343	124	210
	343	103	440		343	125	316
	343	104	223		343	126	333
	343	105	320		343	127	206
	343	106	314		343	128	337
	343	107	316		343	129	214
	343	108	218		343	130	338
	343	109	239		343	131	438
	343	110	217		343	132	305
	343	111	216		343	133	312

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	343	134	311		343	160	231
	343	135	310		344	001	227
	343	136	306		344	002	233
	343	137	307		344	003	217
	343	138	308		344	004	206
	343	139	309		344	005	328
	343	144	207		344	006	207
	343	145	239		344	007	330
	343	146	224		344	008	228
	343	147	320		344	009	229
	343	148	315		344	010	227
	343	149	226		344	011	336
	343	150	441		344	012	212
	343	151	440		344	013	216
	343	152	208		344	014	215
	343	153	340		344	015	213
	343	154	232		344	016	231
	343	155	238		344	017	315
	343	156	338		344	018	441
	343	157	218		344	019	211
	343	158	317		344	020	208
	343	159	330		344	021	229

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	344	022	317		344	044	337
	344	023	215		344	045	214
	344	024	218		344	046	338
	344	025	239		344	047	438
	344	026	217		344	048	303
	344	027	216		344	049	304
	344	028	210		344	050	302
	344	029	341		344	051	301
	344	030	327		344	053	339
	344	031	328		344	054	339
	344	032	209		344	055	314
	344	033	329		344	056	233
	344	034	235		344	057	337
	344	035	331		344	058	234
	344	036	334		344	059	213
	344	037	326		344	060	321
	344	038	329		344	061	319
	344	039	332		344	062	234
	344	040	210		344	063	319
	344	041	316		344	064	335
	344	042	333		344	065	240
	344	043	206		344	066	238

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	344	067	237		344	089	226
	344	068	332		344	090	232
	344	069	237		344	091	214
	344	070	212		344	092	209
	344	071	240		344	093	341
	344	072	235		344	094	334
	344	073	224		344	095	223
	344	074	336		344	096	318
	344	075	326		344	097	222
	344	076	321		344	098	331
	344	077	230		344	099	335
	344	078	230		344	100	318
	344	079	211		344	101	222
	344	080	340		344	102	435
	344	081	440		344	103	438
	344	082	223		344	104	435
	344	083	320		344	105	436
	344	084	314		344	106	439
	344	085	316		344	107	437
	344	086	333		344	108	436
	344	087	327		344	109	313
	344	088	228		344	110	305

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	344	111	312		344	137	330
	344	112	311		344	138	339
	344	113	310		344	139	314
	344	114	306		344	140	233
	344	115	307		344	141	337
	344	116	308		344	142	234
	344	117	309		344	143	213
	344	122	207		344	144	321
	344	123	239		344	145	319
	344	124	224		344	146	234
	344	125	320		344	147	319
	344	126	315		344	148	335
	344	127	226		344	149	240
	344	128	441		344	150	238
	344	129	440		344	151	237
	344	130	208		344	152	332
	344	131	340		344	153	237
	344	132	232		344	154	231
	344	133	238		344	155	315
	344	134	338		344	156	441
	344	135	218		344	157	211
	344	136	317		344	158	208

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	344	159	229		345	021	222
	344	160	317		345	022	331
	345	001	215		345	023	335
	345	002	218		345	024	318
	345	003	239		345	025	222
	345	004	217		345	026	303
	345	005	216		345	027	304
	345	006	210		345	028	302
	345	007	341		345	029	301
	345	008	327		345	031	339
	345	009	328		345	032	231
	345	010	333		345	033	227
	345	011	327		345	034	233
	345	012	228		345	035	217
	345	013	226		345	036	206
	345	014	232		345	037	328
	345	015	214		345	038	207
	345	016	209		345	039	330
	345	017	341		345	040	228
	345	018	334		345	041	229
	345	019	223		345	042	227
	345	020	318		345	043	336

Tape stops	Marker number	Index marker	Replace boards		Tape stops	Marker number	Index marker	Replace boards
	345	044	212			345	066	235
	345	045	216			345	067	331
	345	046	215			345	068	334
	345	047	213			345	069	326
	345	048	212			345	070	329
	345	049	240			345	071	332
	345	050	235			345	072	210
	345	051	224			345	073	316
	345	052	336			345	074	333
	345	053	326			345	075	206
	345	054	321			345	076	337
	345	055	230			345	077	214
	345	056	230			345	078	338
	345	057	211			345	079	438
	345	058	340			345	080	435
	345	059	440			345	081	438
	345	060	223			345	082	435
	345	061	320			345	083	436
	345	062	314			345	084	439
	345	063	316			345	085	437
	345	064	209			345	086	436
	345	065	329			345	087	313

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	345	088	305		345	114	317
	345	089	312		345	115	330
	345	090	311		345	116	339
	345	091	310		345	117	314
	345	092	306		345	118	233
	345	093	307		345	119	337
	345	094	308		345	120	234
	345	095	309		345	121	213
	345	100	207		345	122	321
	345	101	239		345	123	319
	345	102	224		345	124	234
	345	103	320		345	125	319
	345	104	315		345	126	335
	345	105	226		345	127	240
	345	106	441		345	128	238
	345	107	440		345	129	237
	345	108	208		345	130	332
	345	109	340		345	131	237
	345	110	232		345	132	231
	345	111	238		345	133	227
	345	112	338		345	134	223
	345	113	218		345	135	217

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	345	152	336		345	158	340
	345	153	326		345	159	440
	345	154	321		345	160	223
	345	155	230		346	001	320
	345	156	230		346	002	314
	345	157	211		346	003	316
	345	136	206		346	004	303
	345	137	328		346	005	304
	345	138	207		346	006	302
	345	139	330		346	007	301
	345	140	228		346	009	339
	345	141	229		346	010	231
	345	142	227		346	011	315
	345	143	336		346	012	441
	345	144	212		346	013	211
	345	145	216		346	014	208
	345	146	215		346	015	229
	345	147	213		346	016	317
	345	148	212		346	017	215
	345	149	240		346	018	218
	345	150	235		346	019	239
	345	151	224		346	020	217

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	346	021	216		346	043	329
	346	022	210		346	044	235
	346	023	341		346	045	331
	346	024	327		346	046	334
	346	025	328		346	047	326
	346	026	333		346	048	329
	346	027	327		346	049	332
	346	028	228		346	050	210
	346	029	226		346	051	316
	346	030	232		346	052	333
	346	031	214		346	053	206
	346	032	209		346	054	337
	346	033	341		346	055	214
	346	034	334		346	056	338
	346	035	223		346	057	438
	346	036	318		346	058	435
	346	037	222		346	059	438
	346	038	331		346	060	435
	346	039	335		346	061	436
	346	040	318		346	062	439
	346	041	222		346	063	437
	346	042	209		346	064	436

Tape stops	Marker number	Index marker	Replace boards		Tape stops	Marker number	Index marker	Replace boards
	346	065	313			346	091	319
	346	066	305			346	092	240
	346	067	312			346	093	237
	346	068	311			346	094	237
	346	069	310			346	095	227
	346	070	306			346	096	217
	346	071	307			346	097	328
	346	072	308			346	098	330
	346	073	309			346	099	229
	346	078	339			346	100	336
	346	079	239			346	101	216
	346	080	320			346	102	213
	346	081	226			346	103	240
	346	082	440			346	104	224
	346	083	340			346	105	326
	346	084	238			346	106	230
	346	085	218			346	107	211
	348	086	330			346	108	440
	346	087	314			346	109	320
	346	088	337			346	110	316
	346	089	213			346	111	315
	348	090	319			346	112	211

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	346	113	229		346	135	438
	346	114	215		346	136	436
	346	115	239		346	137	237
	346	116	216		346	138	313
	346	117	341		346	139	312
	346	118	328		346	140	310
	346	119	327		346	141	307
	346	120	226		346	142	309
	346	121	214		346	143	304
	346	122	341		346	144	301
	346	123	223		346	146	207
	346	124	222		346	147	224
	346	125	335		346	148	315
	346	126	222		346	149	441
	346	127	329		346	150	208
	346	128	331		346	151	232
	346	129	326		346	152	338
	346	130	332		346	153	317
	346	131	316		346	154	339
	346	132	206		346	155	233
	346	133	214		346	156	234
	346	134	438		346	157	321

Tape stops	Marker number	Index marker	Replace boards	Tape stops	Marker number	Index marker	Replace boards
	346	158	234		347	020	208
	346	159	335		347	021	317
	346	160	238		347	022	218
	347	001	332		347	023	217
	347	002	231		347	024	210
	347	003	233		347	025	327
	347	004	206		347	026	333
	347	005	207		347	027	228
	347	006	228		347	028	232
	347	007	227		347	029	209
	347	008	212		347	030	334
	347	009	215		347	031	318
	347	010	212		347	032	331
	347	011	235		347	033	318
	347	012	336		347	034	209
	347	013	321		347	035	235
	347	014	230		347	036	334
	347	015	340		347	037	329
	347	016	223		347	038	210
	347	017	314		347	039	333
	347	018	231		347	040	337
	347	019	441		347	041	338

Tape stops	Marker number	Index marker	Replace boards
	347	042	435
	347	043	435
	347	044	439
	347	045	436
	347	046	305

Tape stops	Marker number	Index marker	Replace boards
	359	ALL	325, 328
	360	ALL	325, 327
	361	ALL	325, 326
	362	ALL	325, 329
	363	ALL	321, 324

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E. C. MEYER
General, United States Army
Chief of Staff

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