XDS 900870D
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DIAGNOSTIC PROGRAM MANUAL

SIGMA 5 AND 7 CPU DIAGNOSTIC PROGRAM (VERIFY)

PROGRAM NO. 704042D

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LIST OF EFFECTIVE PAGES

Total number of pages is 88, as follows:

CONTENTS

RELATED PUBLICATIONS

The following publications contain information, supplementary to but not required, for a complete understanding of the Sigma 5 and 7 CPU Diagnostic Program (Verify).

Publication Title	Publication No.
XDS Sigma 7 Computer, Reference Manual	900950
Sigma 7 CPU Diagnostic System (Sense), Diagnostic Program Manual	900824
Sigma 7 Computer, Technical Manual	901060
XDS Sigma 5 Computer, Reference Manual	900959
Sigma 5 Computer, Technical Manual	901172

SECTION I
INTRODUCTION

1-1 SCOPE OF MANUAL

This manual describes the verify program, designed for the Sigma 5 and 7 Computers, manufactured by Xerox Data Systems, El Segundo, California.

This manual is made up of five sections. Section I is a general introduction to the Verify program. Section II is a detailed discussion of operating procedures. Section III is a detailed discussion of the program operations. Section IV contains the Verify program listing. Section V contains the concordance listing.

1-2 PROGRAM OBJECTIVE

The object of the program is to detect and diagnose errors pertaining to the Load Program Status Doubleword (LPSD), Load Word (LW), Store Word (STW), Branch on Conditions Set (BCS), Branch on Conditions Reset (BCR), AND Word (AND), Exclusive OR Word (EOR), and Branch and Incrementing Register (BIR) instructions. The LPSD, LW, STW, EOR and AND instructions are checked only to the extent that their results can be verified by resultant condition code settings.

1-3 GENERAL SPECIFICATIONS

Table 1-1 lists general specifications for this program.

Table 1-1. General Specifications

Computer Configuration	Any Sigma 5 or 7 computer with card or paper tape reader
Prerequisites	The sense diagnostic test must have run successfully (on Sigma 7 only)

SECTION II
OPERATING INSTRUCTIONS

2-1 GENERAL

The verify program consists of 133 separate and independent test routines or blocks. Upon the completion of each block, program control is transferred to the next sequential block unless the short loop is invoked. Program operation begins at hexadecimal location 140 and can be restarted at this location at any time. Registers 0 through 3 of page 0 are used throughout the program. The block number is maintained in register 1 of page 0, the error count in register 2 of page 0, and the pass count in register 3 of page 0.

The listing of each block is headed by a statement concerning the objective of the block which may be used as an aid to error diagnosis upon indication of a failure in that block.

2-2 LOADING INSTRUCTIONS

Table 2-1 indicates initial switch settings. After the initial switch settings have been completed, the following procedures are required:

a. Clear memory.

b. Perform standard load procedure (see Sigma 7 Computer, Reference Manual, No. 900950).

Table 2-1. Initial Switch Settings

Switch	Setting
CONTROL MODE	LOCAL
WATCHDOG TIMER	NORMAL
INTERLEAVE SELECT	NORMAL
AUDIO	ON
PARITY ERROR MODE	CONT
SENSE	Off

2-3 SUCCESS INDICATIONS

After the final block has been executed, the program is re-executed starting with block No. 1 and a pass counter, which is maintained in register 3, is increased by one. If no error halts occur, the accumulated number of passes through the entire 133 block of tests may be inspected in register 3 during the report wait (see paragraph 2-5).

2-4 ERROR INDICATIONS AND PROCEDURES

Each block contains its own error WAIT. The program will halt whenever a failure occurs unless the suppress error halt option (see paragraph 2-5) is invoked. During the error halt, inspection of register 1 will indicate the failing block number. The block heading will state the test objective, hence the nature of the failure may be deduced. The program may now be forced into a loop of the failing block if the short loop option (see paragraph 2-5) is invoked, or the program may be permitted to proceed to the next sequential block if the short loop operation is not invoked.

In either case, the error count maintained in register 2 is incremented whenever a failure occurs.

Clear the halt to continue.

2-5 Options

REPORT. By setting SENSE switch 3, a program WAIT will occur at the beginning of the next block. Register 1 will continue the identification number of the preceding block.

SUPPRESS ERROR HALT. By setting SENSE switch 4, the program will continue to the next sequential block without halting upon detection of a failure.

SHORT LOOP. By setting SENSE switch 2, the program will cause the continual re-execution of the current test block.

SECTION III
PROGRAM DESCRIPTION

3-1 GENERAL

All functions of LW are executed that will affect the lower condition code in all its configurations, i.e., zero to reset CC3 and CC4, a negative value to set CC4, and successive ones in each bit position to set CC3.

EOR is tested by executing an LW-EOR sequence with bit combinations of zeros on zeros, ones on ones, and one on zero in all bit positions. Verification of successful EOR execution is determined by the resultant setting of CC3 and CC4.

AND is tested by executing an LW-AND sequence with bit combinations of zero AND zero, zero AND one, one AND zero, one AND one in all bit positions. Verification of successful execution is determined by the resultant setting of CC3 and CC4.

STW is tested by storing zero, -1 on zero, -1 on -1, and zero on zero, reloading the stored values and comparing the reloaded value (via EOR and condition code setting) against the original value.

BCS and BCR are tested by executing these instructions after setting various combinations of lower condition codes (via LW) and determining the validity of the resultant branch/no branch execution.

BIR is tested by successively filling the less significant bit positions of the test register (0, 1, 3, 7, F, . . . 3 FFFFFFF), executing the BIR, and checking if the following conditions resulted:

1. Did the expected branch/no branch execution occur?

2. Was the value resident in the test register properly incremented?

3. Was the resultant condition code setting correct?

An incidental bonus of this test is that one functional series of the adder carry logic is also tested.

After execution of the upper condition codes is examined, the LPSD is tested by executing LPSD with various condition code settings in PSW1.

The flow diagrams listed as figure 3-1 describe the operation and sequences of the 133 separate and independent test routines or blocks.

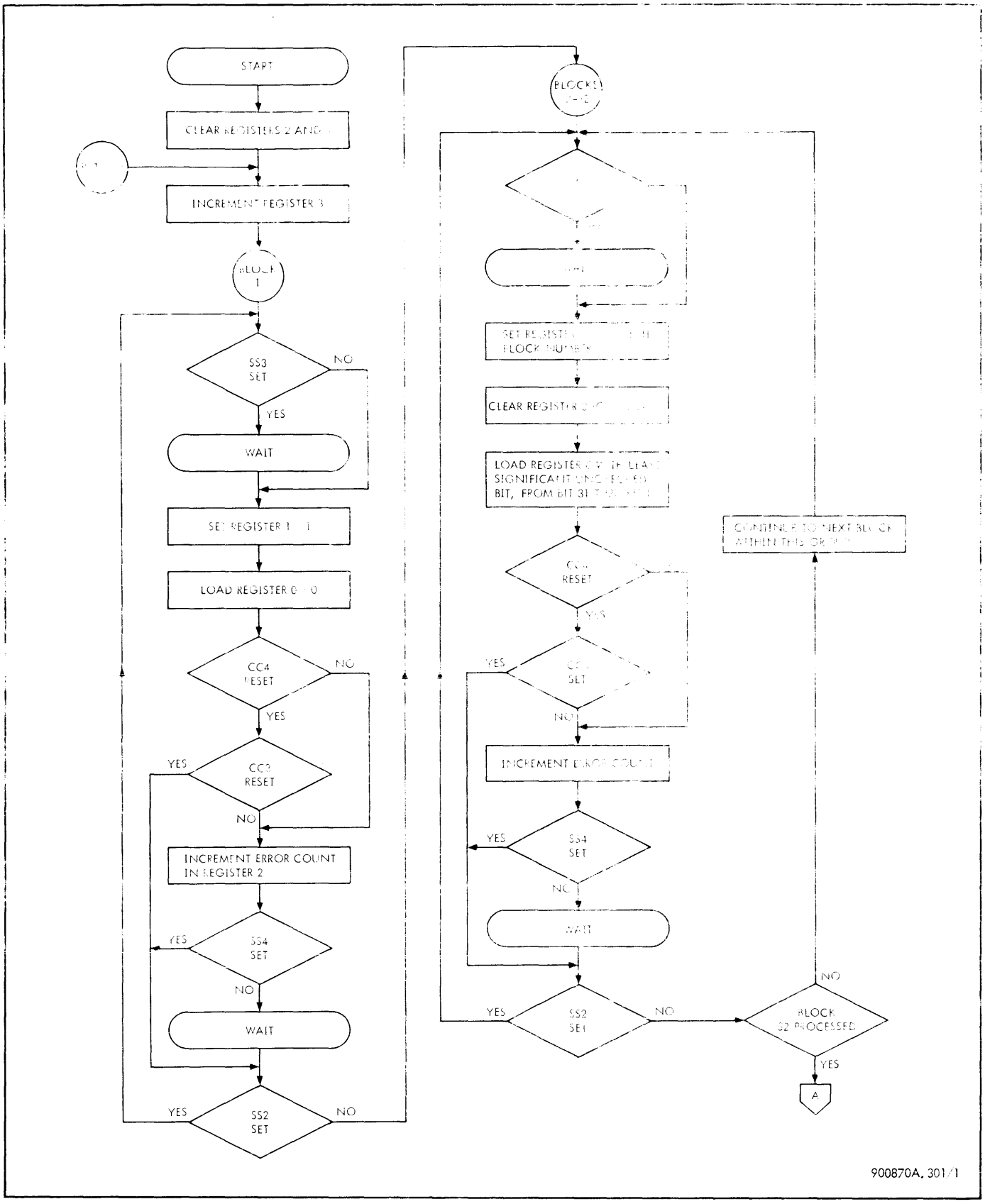

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 1 of 13)

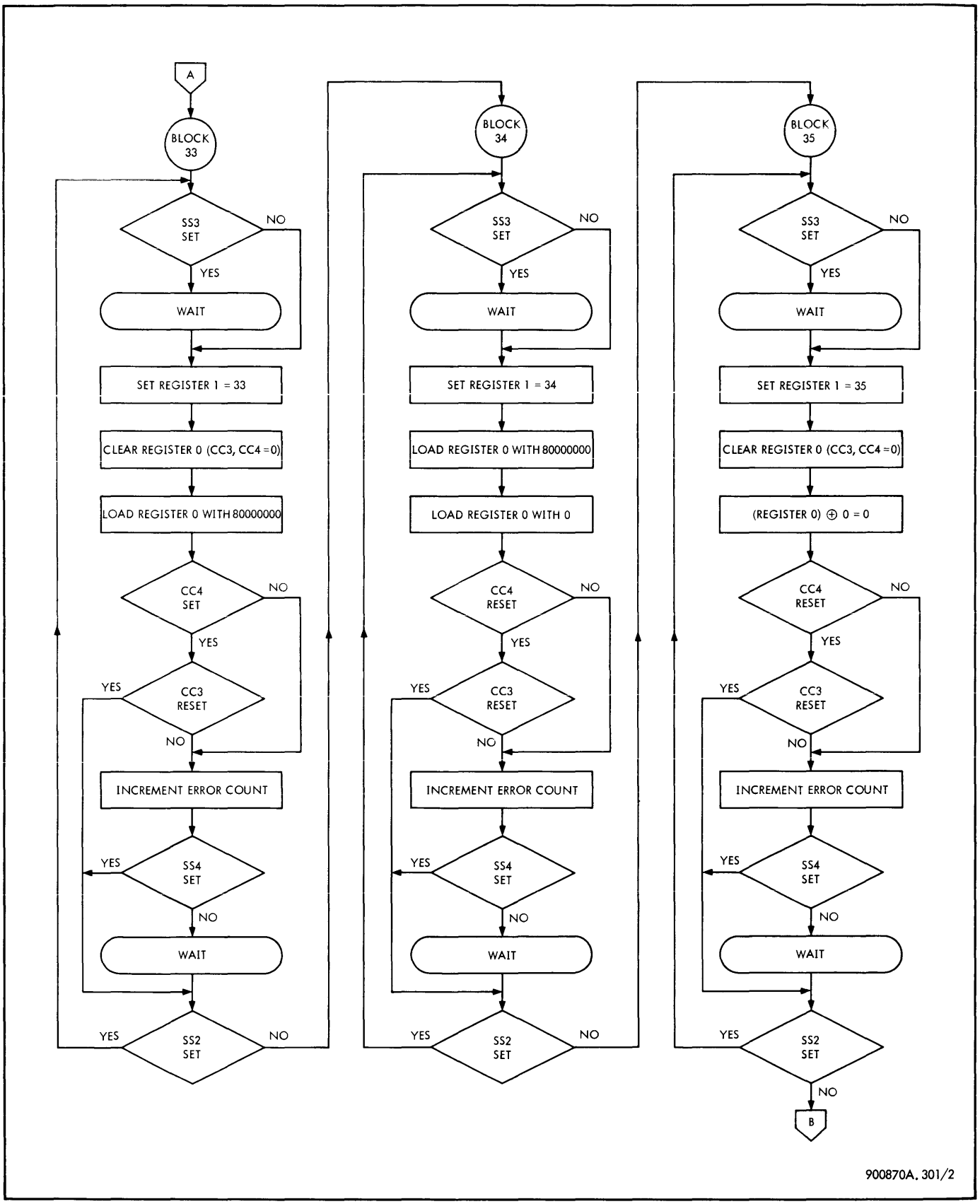

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 2 of 13)

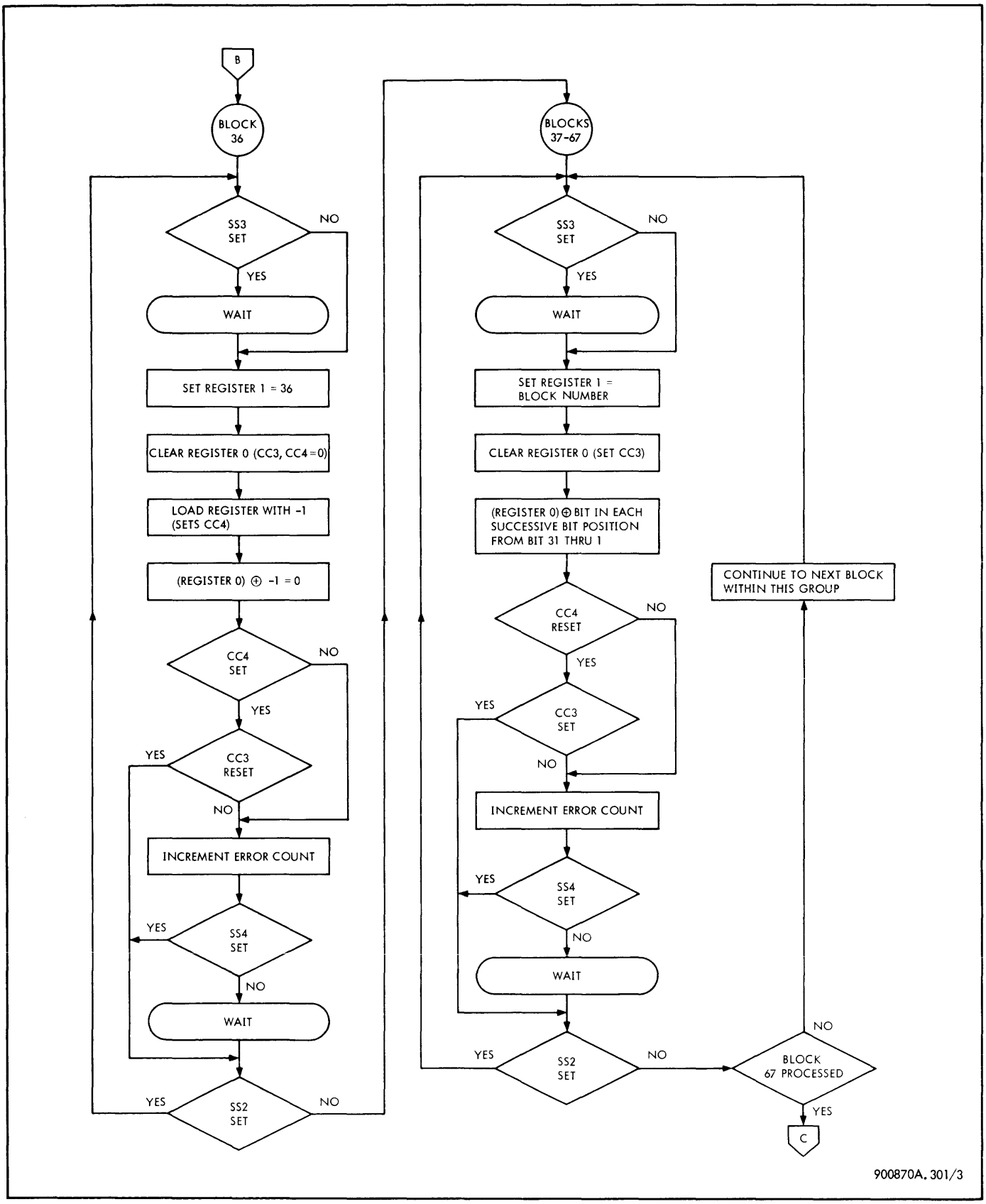

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 3 of 13)

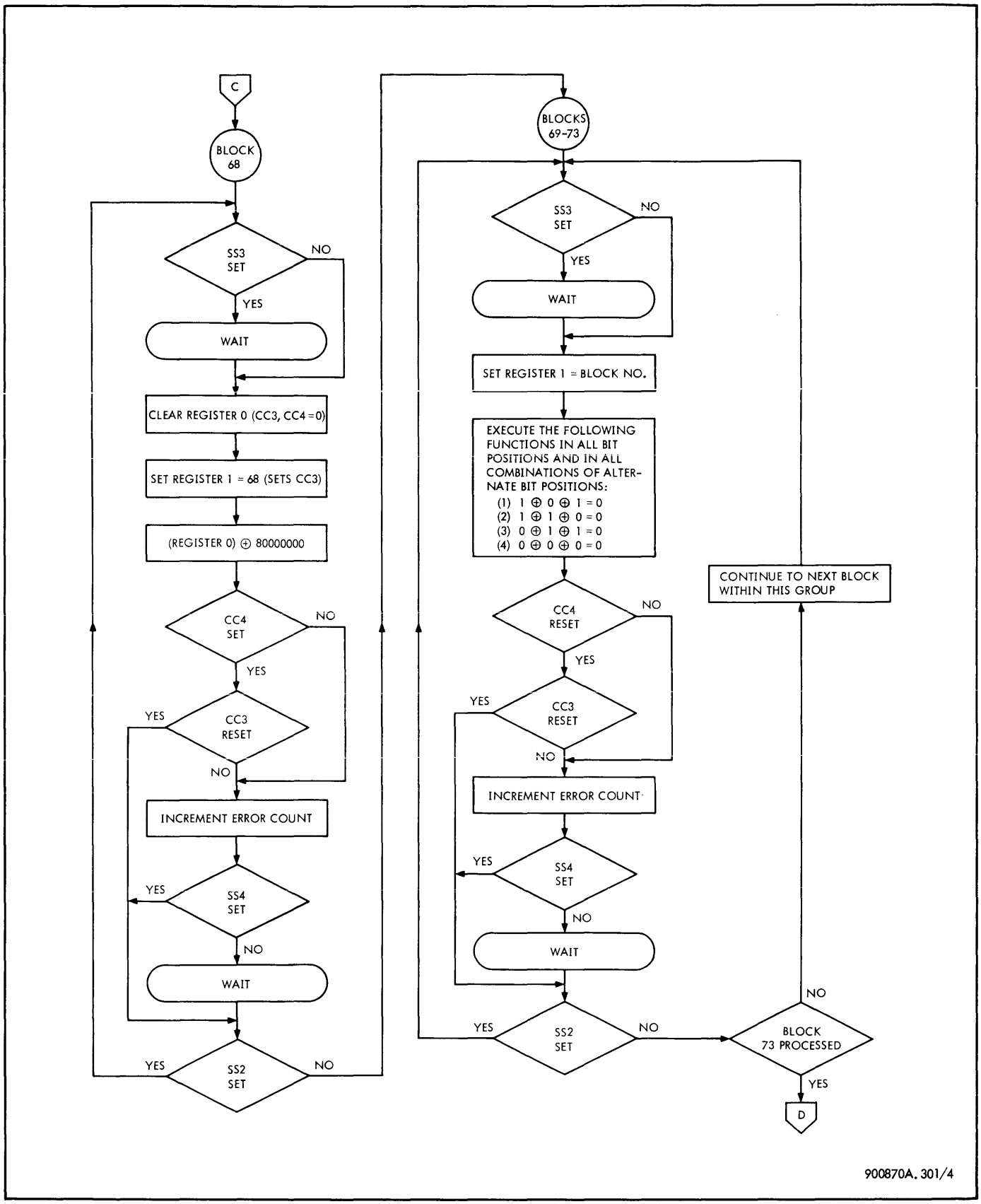

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 4 of 13)

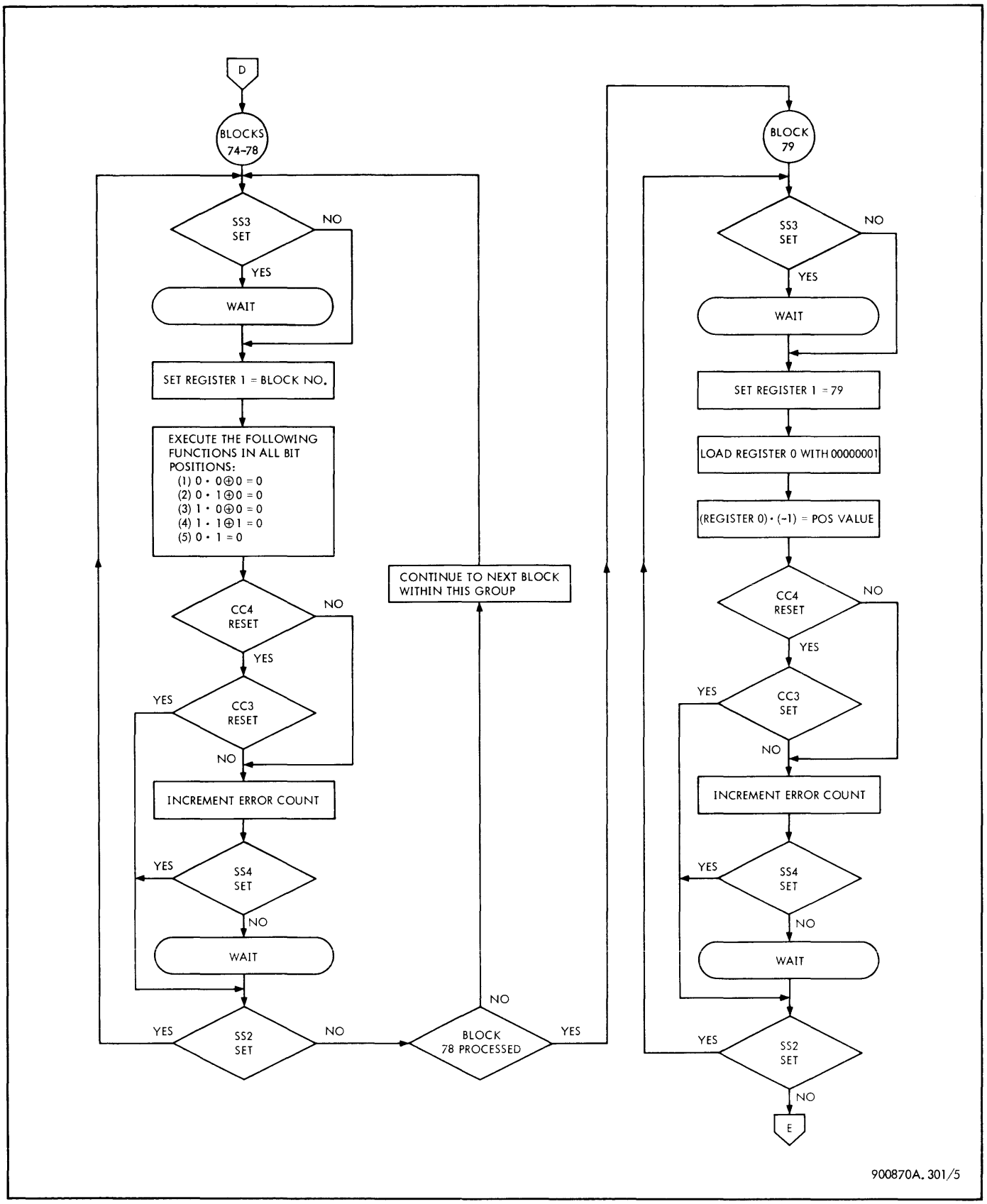

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 5 of 13)

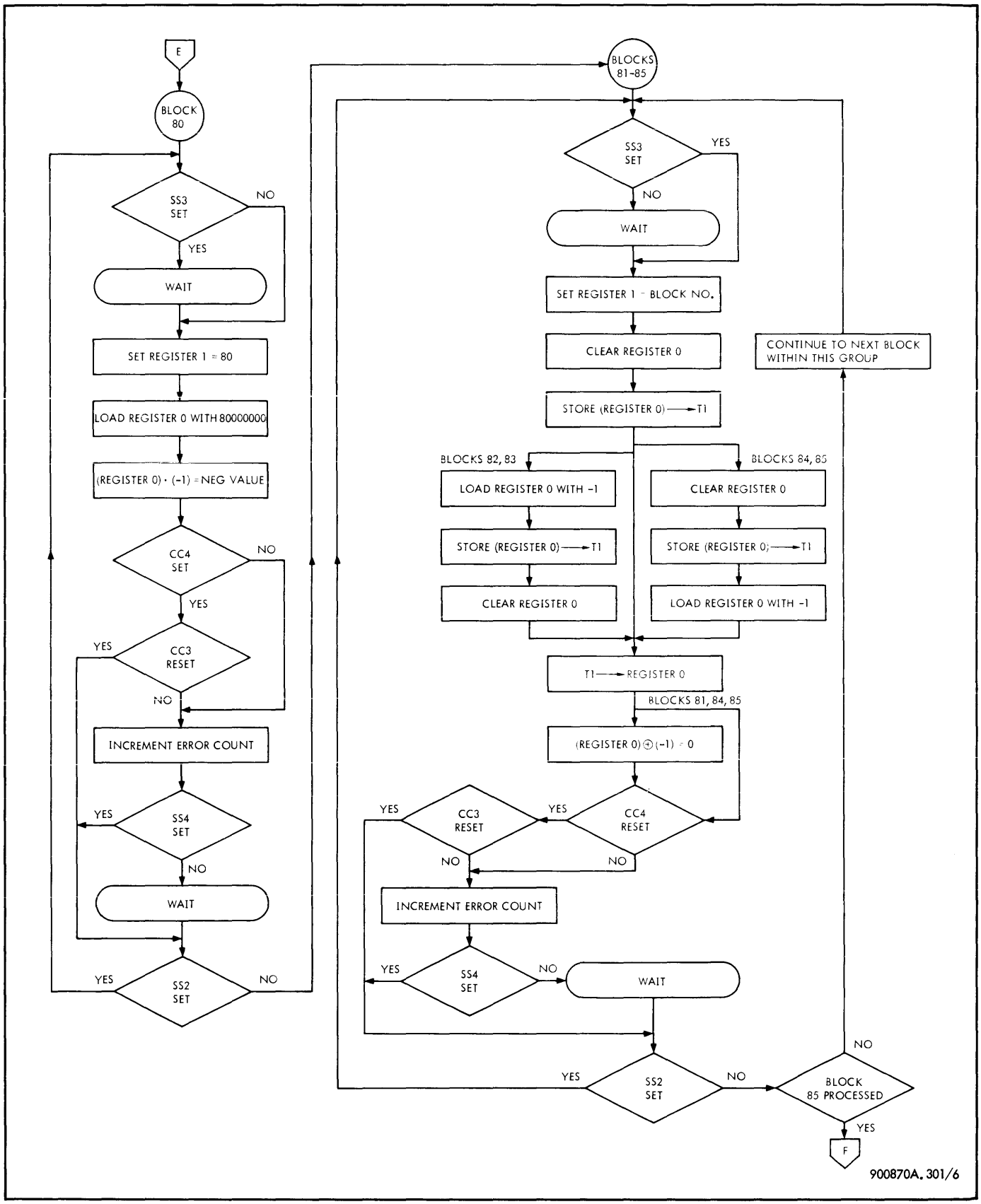

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 6 of 13)

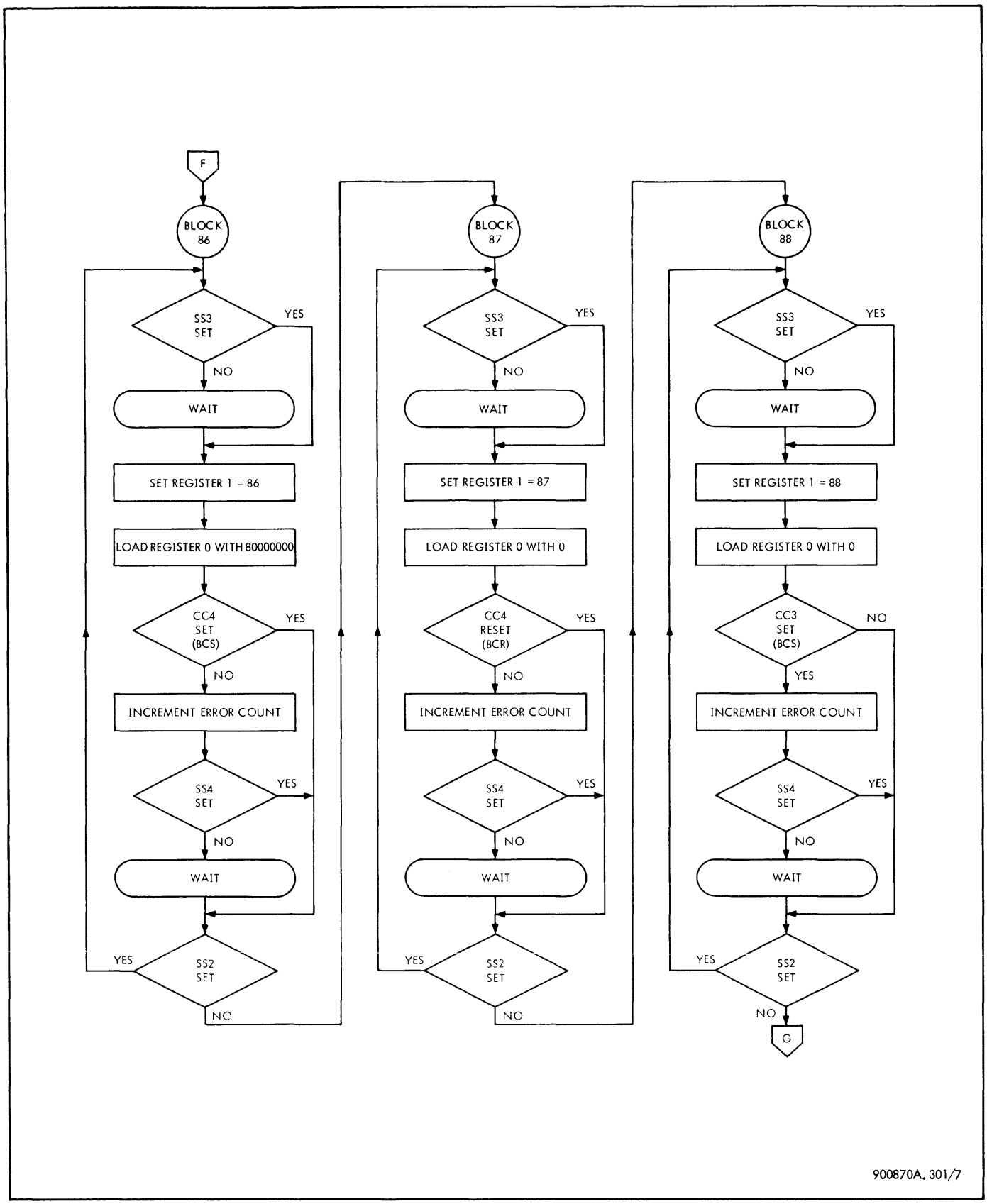

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 7 of 13)

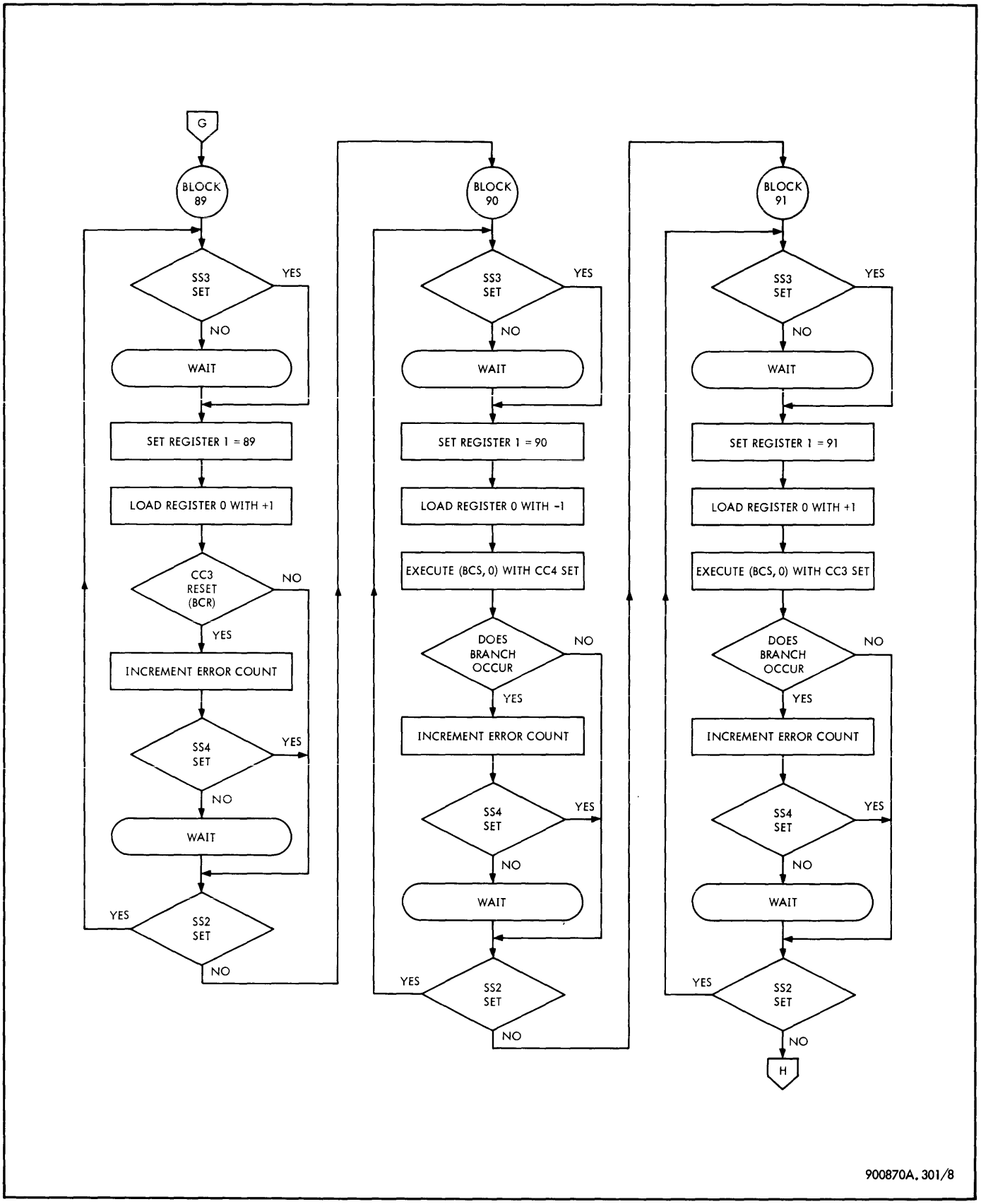

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 8 of 13)

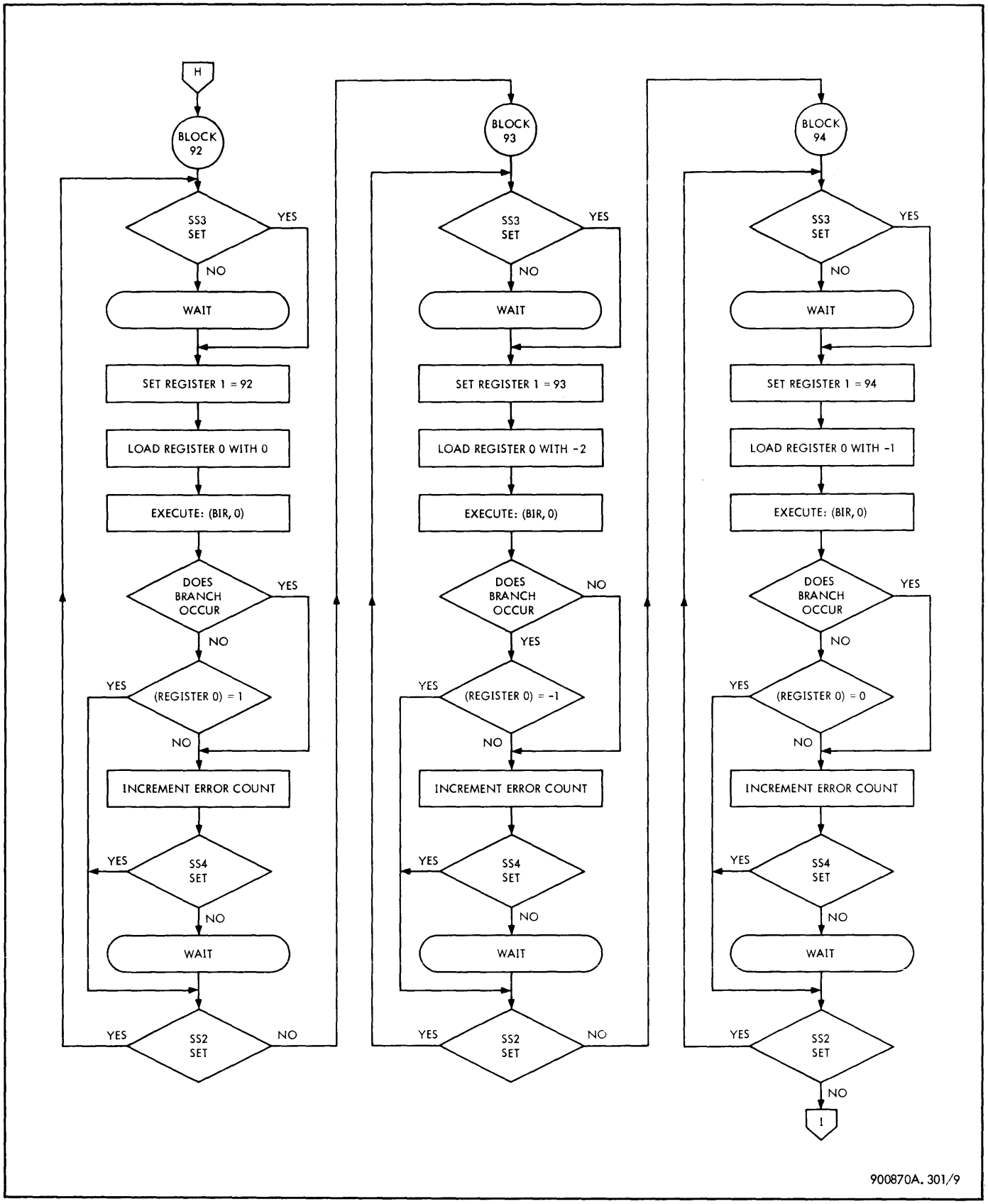

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 9 of 13)

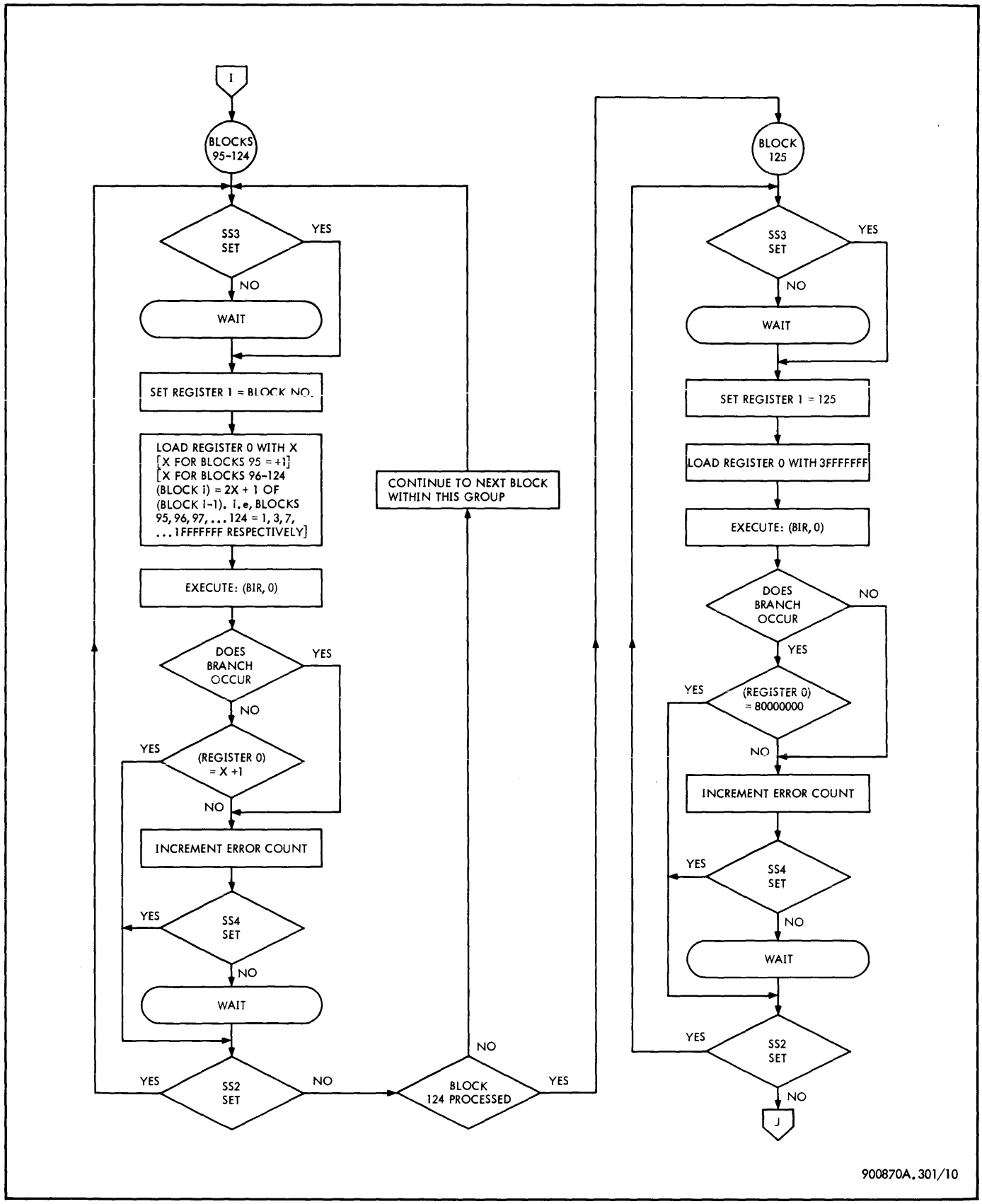

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 10 of 13)

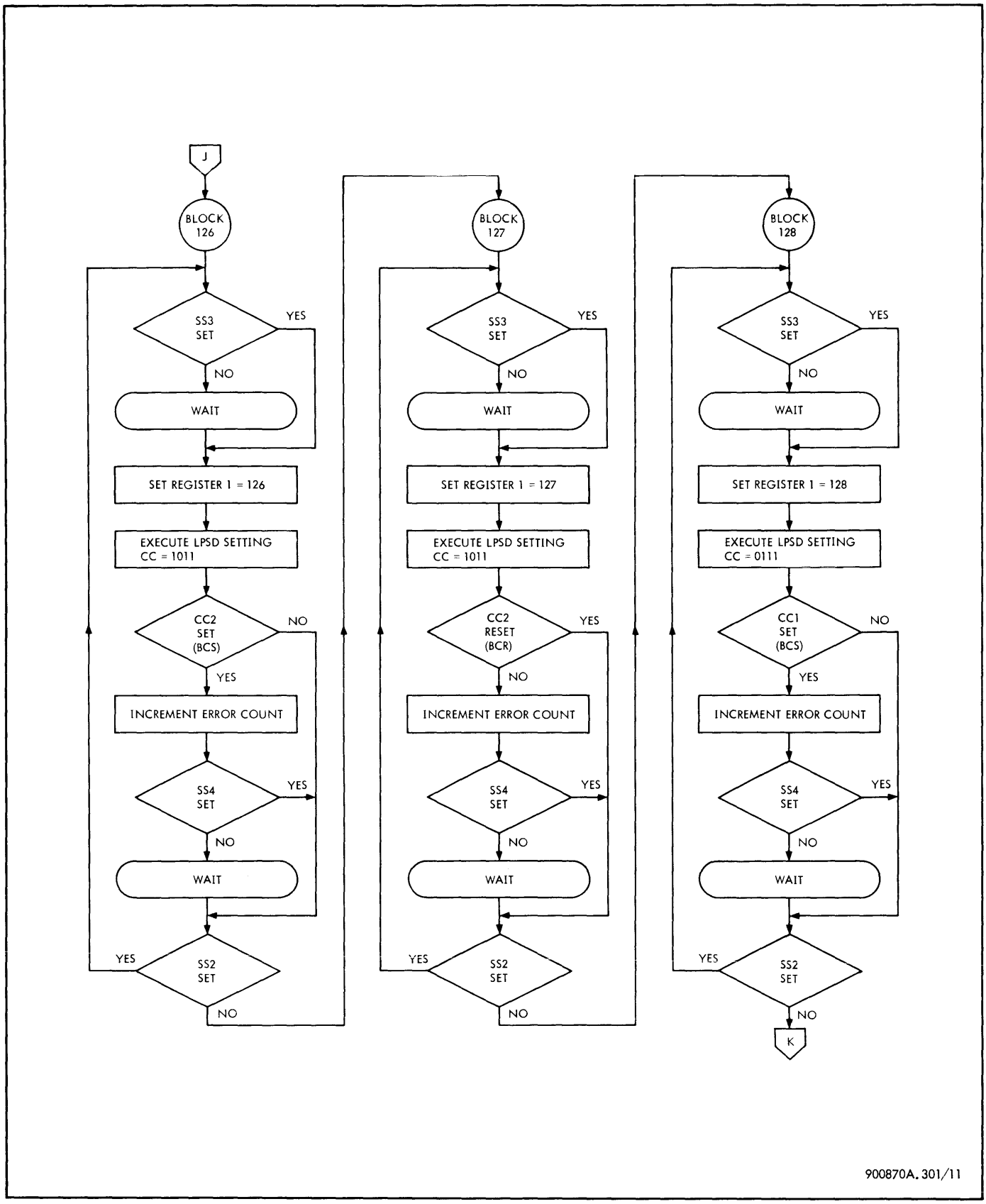

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 11 of 13)

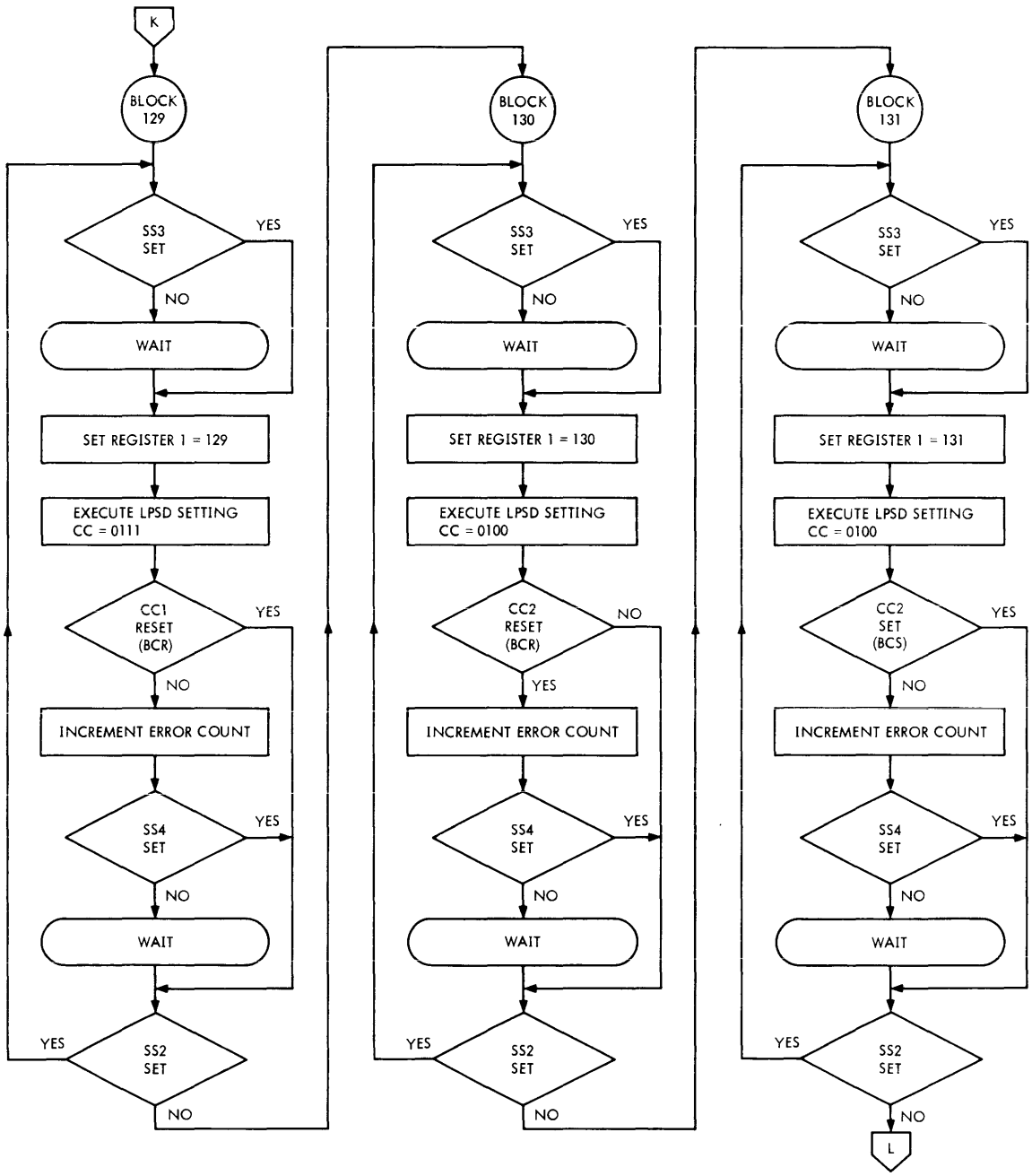

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 12 of 13)

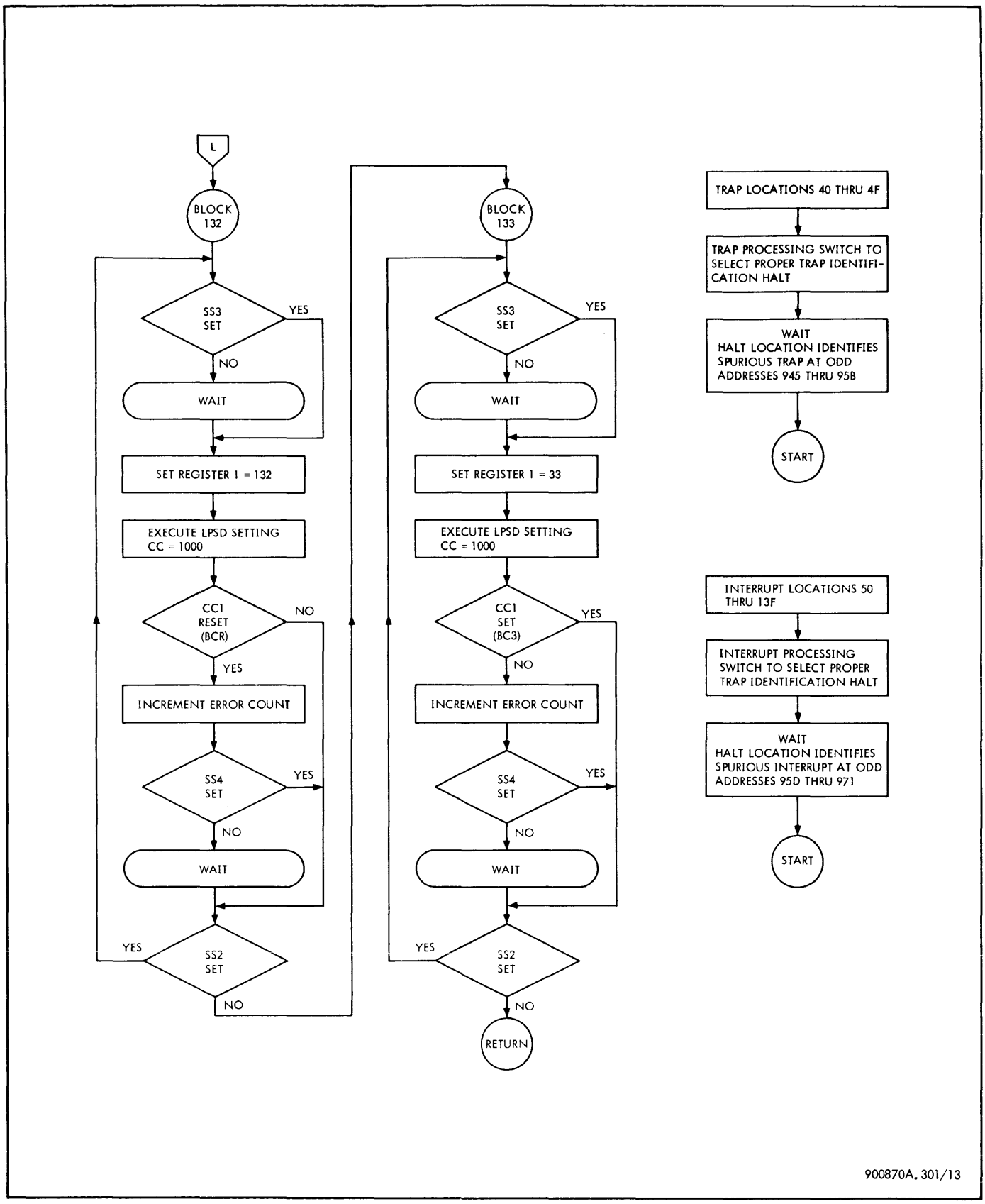

Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 13 of 13)

SECTION IV
PROGRAM LISTING

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1						SIGMA 5/7 CPU TEST-VERIFY 704042-51D00		
2						TITLE 'SIGMA 5/7 CPU TEST-VERIFY 704042-51D00 JULY 01,1969'		
3						SYSTEM SIG7FDP		
4					*			
5					*	REVISION D00 (7/01/69) DOCUMENTATION REFORMATTING CHANGE ONLY		*D
6					*			
7						OPEN PAGE	THIS INHIBITS	*D
8		00000000			PAGE	CNAME	PAGE	*D
9						PROC	DIRECTIVE	*D
10						PEND	TO PERMIT MAX. LINAGE/PAGE	*D
11					*			
12						PAGE		
13					*			
14					*	PROGRAM CONTROL AND DISPLAY INFORMATION		
15					*			
16					*	SENSE CONDITION	ACTION	
17					*	SWITCH		
18					*			
19					*	2 RESET	NORMAL OPERATION	
20					*	SET	LOOP ON CURRENT BLOCK	
21					*			
22					*	3 RESET	NORMAL OPERATION	
23					*	SET	REPORT	
24					*			
25					*	4 RESET	HALT ON ERRORS	
26					*	SET	NO HALT ON ERRORS	
27					*			
28					*			
29					*			
30					*	REGISTER	CONTENTS	
31					*			
32					*	0	ALL ATTEMPTED OPERATIONS ADDRESS ONLY THIS REGISTER	
33					*			
34					*	1	ADDRESS OF LAST BLOCK ATTEMPTED OR ERRORING BLOCK	
35					*			
36					*	2	ERROR COUNT	
37					*			
38					*	3	RUN COUNT	
39						PAGE		
40		0000000A			A	EQU	X'A'	
41		0000000B			B	EQU	X'B'	
42		0000000C			C	EQU	X'C'	
43		0000000D			D	EQU	X'D'	
44		0000000E			E	EQU	X'E'	
45		0000000F			F	EQU	X'F'	
46						PAGE		
47		00 00000			SPINTR	ASECT		
48		00 00040				ORG	X'40'	
		00 00040						
49					*			
50					*	TRAP LOCATIONS (ALL SPURIOUS)		
51					*			
52		00 00040	0F0008E4	A		XPSD,0	NONOP	
53		00 00041	0F0008E8	A		XPSD,0	UNIMP	
54		00 00042	0F0008EC	A		XPSD,0	STACK	
55		00 00043	0F0008F0	A		XPSD,0	OFLO	
56		00 00044	0F0008F4	A		XPSD,0	FLOAT	
57		00 00045	0F0008F8	A		XPSD,0	DEC	
58		00 00046	0F0008FC	A		XPSD,0	TIMER	
59		00 00047	0F000900	A		XPSD,0	TUNASS	
60		00 00048	0F000904	A		XPSD,0	CALL1	
61		00 00049	0F000908	A		XPSD,0	CALL2	
62		00 0004A	0F00090C	A		XPSD,0	CALL3	
63		00 0004B	0F000910	A		XPSD,0	CALL4	
64		00 0004C	0F000900	A		XPSD,0	TUNASS	
65		00 0004D	0F000900	A		XPSD,0	TUNASS	
66		00 0004E	0F000900	A		XPSD,0	TUNASS	
67		00 0004F	0F000900	A		XPSD,0	TUNASS	
68						PAGE		
69					*			
70					*	INTERRUPT LOCATIONS (ALL SPURIOUS)		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
71					*			
72	00	00050	0F000914	A		XPSD,0	PØWØN	
73	00	00051	0F000918	A		XPSD,0	PØWØFF	
74	00	00052	3300091C	A		MTW,0	PULSE1	
75	00	00053	3300091D	A		MTW,0	PULSE2	
76	00	00054	3300091E	A		MTW,0	PULSE3	
77	00	00055	3300091F	A		MTW,0	PULSE4	
78	00	00056	0F000920	A		XPSD,0	MEMPAR	
79	00	00057	0F000924	A		XPSD,0	UNASIN	
80	00	00058	0F000928	A		XPSD,0	CØUNT1	
81	00	00059	0F00092C	A		XPSD,0	CØUNT2	
82	00	0005A	0F000930	A		XPSD,0	CØUNT3	
83	00	0005B	0F000934	A		XPSD,0	CØUNT4	
84	00	0005C	0F000938	A		XPSD,0	INØUT	
85	00	0005D	0F00093C	A		XPSD,0	PANEL	
86	00	0005E	0F000924	A		XPSD,0	UNASIN	
87	00	0005F	0F000924	A		XPSD,0	UNASIN	
88	00	00060	0F000940	A		XPSD,0	EXTERN	
89	00	00061	0F000940	A		XPSD,0	EXTERN	
90	00	00062	0F000940	A		XPSD,0	EXTERN	
91	00	00063	0F000940	A		XPSD,0	EXTERN	
92	00	00064	0F000940	A		XPSD,0	EXTERN	
93	00	00065	0F000940	A		XPSD,0	EXTERN	
94	00	00066	0F000940	A		XPSD,0	EXTERN	
95	00	00067	0F000940	A		XPSD,0	EXTERN	
96	00	00068	0F000940	A		XPSD,0	EXTERN	
97	00	00069	0F000940	A		XPSD,0	EXTERN	
98	00	0006A	0F000940	A		XPSD,0	EXTERN	
99	00	0006B	0F000940	A		XPSD,0	EXTERN	
100	00	0006C	0F000940	A		XPSD,0	EXTERN	
101	00	0006D	0F000940	A		XPSD,0	EXTERN	
102	00	0006E	0F000940	A		XPSD,0	EXTERN	
103	00	0006F	0F000940	A		XPSD,0	EXTERN	
104	00	00070	0F000940	A		XPSD,0	EXTERN	
105	00	00071	0F000940	A		XPSD,0	EXTERN	
106	00	00072	0F000940	A		XPSD,0	EXTERN	
107	00	00073	0F000940	A		XPSD,0	EXTERN	
108	00	00074	0F000940	A		XPSD,0	EXTERN	
109	00	00075	0F000940	A		XPSD,0	EXTERN	
110	00	00076	0F000940	A		XPSD,0	EXTERN	
111	00	00077	0F000940	A		XPSD,0	EXTERN	
112	00	00078	0F000940	A		XPSD,0	EXTERN	
113	00	00079	0F000940	A		XPSD,0	EXTERN	
114	00	0007A	0F000940	A		XPSD,0	EXTERN	
115	00	0007B	0F000940	A		XPSD,0	EXTERN	
116	00	0007C	0F000940	A		XPSD,0	EXTERN	
117	00	0007D	0F000940	A		XPSD,0	EXTERN	
118	00	0007E	0F000940	A		XPSD,0	EXTERN	
119	00	0007F	0F000940	A		XPSD,0	EXTERN	
120	00	00080	0F000940	A		XPSD,0	EXTERN	
121	00	00081	0F000940	A		XPSD,0	EXTERN	
122	00	00082	0F000940	A		XPSD,0	EXTERN	
123	00	00083	0F000940	A		XPSD,0	EXTERN	
124	00	00084	0F000940	A		XPSD,0	EXTERN	
125	00	00085	0F000940	A		XPSD,0	EXTERN	
126	00	00086	0F000940	A		XPSD,0	EXTERN	
127	00	00087	0F000940	A		XPSD,0	EXTERN	
128	00	00088	0F000940	A		XPSD,0	EXTERN	
129	00	00089	0F000940	A		XPSD,0	EXTERN	
130	00	0008A	0F000940	A		XPSD,0	EXTERN	
131	00	0008B	0F000940	A		XPSD,0	EXTERN	
132	00	0008C	0F000940	A		XPSD,0	EXTERN	
133	00	0008D	0F000940	A		XPSD,0	EXTERN	
134	00	0008E	0F000940	A		XPSD,0	EXTERN	
135	00	0008F	0F000940	A		XPSD,0	EXTERN	
136	00	00090	0F000940	A		XPSD,0	EXTERN	
137	00	00091	0F000940	A		XPSD,0	EXTERN	
138	00	00092	0F000940	A		XPSD,0	EXTERN	
139	00	00093	0F000940	A		XPSD,0	EXTERN	
140	00	00094	0F000940	A		XPSD,0	EXTERN	
141	00	00095	0F000940	A		XPSD,0	EXTERN	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
142	00	000096	0F000940	A		XPSD,0	EXTERN	
143	00	000097	0F000940	A		XPSD,0	EXTERN	
144	00	000098	0F000940	A		XPSD,0	EXTERN	
145	00	000099	0F000940	A		XPSD,0	EXTERN	
146	00	00009A	0F000940	A		XPSD,0	EXTERN	
147	00	00009B	0F000940	A		XPSD,0	EXTERN	
148	00	00009C	0F000940	A		XPSD,0	EXTERN	
149	00	00009D	0F000940	A		XPSD,0	EXTERN	
150	00	00009E	0F000940	A		XPSD,0	EXTERN	
151	00	00009F	0F000940	A		XPSD,0	EXTERN	
152	00	0000A0	0F000940	A		XPSD,0	EXTERN	
153	00	0000A1	0F000940	A		XPSD,0	EXTERN	
154	00	0000A2	0F000940	A		XPSD,0	EXTERN	
155	00	0000A3	0F000940	A		XPSD,0	EXTERN	
156	00	0000A4	0F000940	A		XPSD,0	EXTERN	
157	00	0000A5	0F000940	A		XPSD,0	EXTERN	
158	00	0000A6	0F000940	A		XPSD,0	EXTERN	
159	00	0000A7	0F000940	A		XPSD,0	EXTERN	
160	00	0000A8	0F000940	A		XPSD,0	EXTERN	
161	00	0000A9	0F000940	A		XPSD,0	EXTERN	
162	00	0000AA	0F000940	A		XPSD,0	EXTERN	
163	00	0000AB	0F000940	A		XPSD,0	EXTERN	
164	00	0000AC	0F000940	A		XPSD,0	EXTERN	
165	00	0000AD	0F000940	A		XPSD,0	EXTERN	
166	00	0000AE	0F000940	A		XPSD,0	EXTERN	
167	00	0000AF	0F000940	A		XPSD,0	EXTERN	
168	00	0000B0	0F000940	A		XPSD,0	EXTERN	
169	00	0000B1	0F000940	A		XPSD,0	EXTERN	
170	00	0000B2	0F000940	A		XPSD,0	EXTERN	
171	00	0000B3	0F000940	A		XPSD,0	EXTERN	
172	00	0000B4	0F000940	A		XPSD,0	EXTERN	
173	00	0000B5	0F000940	A		XPSD,0	EXTERN	
174	00	0000B6	0F000940	A		XPSD,0	EXTERN	
175	00	0000B7	0F000940	A		XPSD,0	EXTERN	
176	00	0000B8	0F000940	A		XPSD,0	EXTERN	
177	00	0000B9	0F000940	A		XPSD,0	EXTERN	
178	00	0000BA	0F000940	A		XPSD,0	EXTERN	
179	00	0000BB	0F000940	A		XPSD,0	EXTERN	
180	00	0000BC	0F000940	A		XPSD,0	EXTERN	
181	00	0000BD	0F000940	A		XPSD,0	EXTERN	
182	00	0000BE	0F000940	A		XPSD,0	EXTERN	
183	00	0000BF	0F000940	A		XPSD,0	EXTERN	
184	00	0000C0	0F000940	A		XPSD,0	EXTERN	
185	00	0000C1	0F000940	A		XPSD,0	EXTERN	
186	00	0000C2	0F000940	A		XPSD,0	EXTERN	
187	00	0000C3	0F000940	A		XPSD,0	EXTERN	
188	00	0000C4	0F000940	A		XPSD,0	EXTERN	
189	00	0000C5	0F000940	A		XPSD,0	EXTERN	
190	00	0000C6	0F000940	A		XPSD,0	EXTERN	
191	00	0000C7	0F000940	A		XPSD,0	EXTERN	
192	00	0000C8	0F000940	A		XPSD,0	EXTERN	
193	00	0000C9	0F000940	A		XPSD,0	EXTERN	
194	00	0000CA	0F000940	A		XPSD,0	EXTERN	
195	00	0000CB	0F000940	A		XPSD,0	EXTERN	
196	00	0000CC	0F000940	A		XPSD,0	EXTERN	
197	00	0000CD	0F000940	A		XPSD,0	EXTERN	
198	00	0000CE	0F000940	A		XPSD,0	EXTERN	
199	00	0000CF	0F000940	A		XPSD,0	EXTERN	
200	00	0000D0	0F000940	A		XPSD,0	EXTERN	
201	00	0000D1	0F000940	A		XPSD,0	EXTERN	
202	00	0000D2	0F000940	A		XPSD,0	EXTERN	
203	00	0000D3	0F000940	A		XPSD,0	EXTERN	
204	00	0000D4	0F000940	A		XPSD,0	EXTERN	
205	00	0000D5	0F000940	A		XPSD,0	EXTERN	
206	00	0000D6	0F000940	A		XPSD,0	EXTERN	
207	00	0000D7	0F000940	A		XPSD,0	EXTERN	
208	00	0000D8	0F000940	A		XPSD,0	EXTERN	
209	00	0000D9	0F000940	A		XPSD,0	EXTERN	
210	00	0000DA	0F000940	A		XPSD,0	EXTERN	
211	00	0000DB	0F000940	A		XPSD,0	EXTERN	
212	00	0000DC	0F000940	A		XPSD,0	EXTERN	
213	00	0000DD	0F000940	A		XPSD,0	EXTERN	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
214	00	00DB	0F000940	A		XPSD,0	EXTERN	
215	00	00DC	0F000940	A		XPSD,0	EXTERN	
216	00	00DD	0F000940	A		XPSD,0	EXTERN	
217	00	00DE	0F000940	A		XPSD,0	EXTERN	
218	00	00DF	0F000940	A		XPSD,0	EXTERN	
219	00	00E0	0F000940	A		XPSD,0	EXTERN	
220	00	00E1	0F000940	A		XPSD,0	EXTERN	
221	00	00E2	0F000940	A		XPSD,0	EXTERN	
222	00	00E3	0F000940	A		XPSD,0	EXTERN	
223	00	00E4	0F000940	A		XPSD,0	EXTERN	
224	00	00E5	0F000940	A		XPSD,0	EXTERN	
225	00	00E6	0F000940	A		XPSD,0	EXTERN	
226	00	00E7	0F000940	A		XPSD,0	EXTERN	
227	00	00E8	0F000940	A		XPSD,0	EXTERN	
228	00	00E9	0F000940	A		XPSD,0	EXTERN	
229	00	00EA	0F000940	A		XPSD,0	EXTERN	
230	00	00EB	0F000940	A		XPSD,0	EXTERN	
231	00	00EC	0F000940	A		XPSD,0	EXTERN	
232	00	00ED	0F000940	A		XPSD,0	EXTERN	
233	00	00EE	0F000940	A		XPSD,0	EXTERN	
234	00	00EF	0F000940	A		XPSD,0	EXTERN	
235	00	00F0	0F000940	A		XPSD,0	EXTERN	
236	00	00F1	0F000940	A		XPSD,0	EXTERN	
237	00	00F2	0F000940	A		XPSD,0	EXTERN	
238	00	00F3	0F000940	A		XPSD,0	EXTERN	
239	00	00F4	0F000940	A		XPSD,0	EXTERN	
240	00	00F5	0F000940	A		XPSD,0	EXTERN	
241	00	00F6	0F000940	A		XPSD,0	EXTERN	
242	00	00F7	0F000940	A		XPSD,0	EXTERN	
243	00	00F8	0F000940	A		XPSD,0	EXTERN	
244	00	00F9	0F000940	A		XPSD,0	EXTERN	
245	00	00FA	0F000940	A		XPSD,0	EXTERN	
246	00	00FB	0F000940	A		XPSD,0	EXTERN	
247	00	00FC	0F000940	A		XPSD,0	EXTERN	
248	00	00FD	0F000940	A		XPSD,0	EXTERN	
249	00	00FE	0F000940	A		XPSD,0	EXTERN	
250	00	00FF	0F000940	A		XPSD,0	EXTERN	
251	00	00100	0F000940	A		XPSD,0	EXTERN	
252	00	00101	0F000940	A		XPSD,0	EXTERN	
253	00	00102	0F000940	A		XPSD,0	EXTERN	
254	00	00103	0F000940	A		XPSD,0	EXTERN	
255	00	00104	0F000940	A		XPSD,0	EXTERN	
256	00	00105	0F000940	A		XPSD,0	EXTERN	
257	00	00106	0F000940	A		XPSD,0	EXTERN	
258	00	00107	0F000940	A		XPSD,0	EXTERN	
259	00	00108	0F000940	A		XPSD,0	EXTERN	
260	00	00109	0F000940	A		XPSD,0	EXTERN	
261	00	0010A	0F000940	A		XPSD,0	EXTERN	
262	00	0010B	0F000940	A		XPSD,0	EXTERN	
263	00	0010C	0F000940	A		XPSD,0	EXTERN	
264	00	0010D	0F000940	A		XPSD,0	EXTERN	
265	00	0010E	0F000940	A		XPSD,0	EXTERN	
266	00	0010F	0F000940	A		XPSD,0	EXTERN	
267	00	00110	0F000940	A		XPSD,0	EXTERN	
268	00	00111	0F000940	A		XPSD,0	EXTERN	
269	00	00112	0F000940	A		XPSD,0	EXTERN	
270	00	00113	0F000940	A		XPSD,0	EXTERN	
271	00	00114	0F000940	A		XPSD,0	EXTERN	
272	00	00115	0F000940	A		XPSD,0	EXTERN	
273	00	00116	0F000940	A		XPSD,0	EXTERN	
274	00	00117	0F000940	A		XPSD,0	EXTERN	
275	00	00118	0F000940	A		XPSD,0	EXTERN	
276	00	00119	0F000940	A		XPSD,0	EXTERN	
277	00	0011A	0F000940	A		XPSD,0	EXTERN	
278	00	0011B	0F000940	A		XPSD,0	EXTERN	
279	00	0011C	0F000940	A		XPSD,0	EXTERN	
280	00	0011D	0F000940	A		XPSD,0	EXTERN	
281	00	0011E	0F000940	A		XPSD,0	EXTERN	
282	00	0011F	0F000940	A		XPSD,0	EXTERN	
283	00	00120	0F000940	A		XPSD,0	EXTERN	
284	00	00121	0F000940	A		XPSD,0	EXTERN	
285	00	00122	0F000940	A		XPSD,0	EXTERN	
286	00	00123	0F000940	A		XPSD,0	EXTERN	
287	00	00124	0F000940	A		XPSD,0	EXTERN	
288	00	00125	0F000940	A		XPSD,0	EXTERN	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
286	00	00126	0F000940	A		XPSD,0	EXTERN	
287	00	00127	0F000940	A		XPSD,0	EXTERN	
288	00	00128	0F000940	A		XPSD,0	EXTERN	
289	00	00129	0F000940	A		XPSD,0	EXTERN	
290	00	0012A	0F000940	A		XPSD,0	EXTERN	
291	00	0012B	0F000940	A		XPSD,0	EXTERN	
292	00	0012C	0F000940	A		XPSD,0	EXTERN	
293	00	0012D	0F000940	A		XPSD,0	EXTERN	
294	00	0012E	0F000940	A		XPSD,0	EXTERN	
295	00	0012F	0F000940	A		XPSD,0	EXTERN	
296	00	00130	0F000940	A		XPSD,0	EXTERN	
297	00	00131	0F000940	A		XPSD,0	EXTERN	
298	00	00132	0F000940	A		XPSD,0	EXTERN	
299	00	00133	0F000940	A		XPSD,0	EXTERN	
300	00	00134	0F000940	A		XPSD,0	EXTERN	
301	00	00135	0F000940	A		XPSD,0	EXTERN	
302	00	00136	0F000940	A		XPSD,0	EXTERN	
303	00	00137	0F000940	A		XPSD,0	EXTERN	
304	00	00138	0F000940	A		XPSD,0	EXTERN	
305	00	00139	0F000940	A		XPSD,0	EXTERN	
306	00	00134	0F000940	A		XPSD,0	EXTERN	
307	00	00135	0F000940	A		XPSD,0	EXTERN	
308	00	0013C	0F000940	A		XPSD,0	EXTERN	
309	00	0013D	0F000940	A		XPSD,0	EXTERN	
310	00	0013E	0F000940	A		XPSD,0	EXTERN	
311	00	0013F	0F000940	A		XPSD,0	EXTERN	
312						PAGE		
313	00	00140				BKS	X'140'	
	00	00140						
314					* PROGRAM INITIALIZATION			
315					*			
316	00	00140	32200975	A	START	LW,2	=0	
317	00	00141	32300975	A		LW,3	=0	
318	00	00142	6B300143	A	RETURN	BIR,3	$+1	
319						PAGE		
320					*			
321					* BLOCK 1			
322					*			
323					* CHECK ABILITY OF LW = 0 TO NOT SET CC4 AND RESET CC3			
324					*			
325	00	00143	6C000010	A	BLK1	RD,0	X'10'	READ SENSE SWITCHES
326	00	00144	68200146	A		BCR,2	$+2	SSW 3 SET
327	00	00145	2E000000	A		WAIT		YES, REPORT
328	00	00146	32100976	A		LW,1	=1	INCREMENT BLOCK COUNTER AND SET CC3
329	00	00147	32000975	A		LW,0	=0	LOAD ZEROS
330	00	00148	6910014A	A		BCS,1	$+2	CC4 SET
331	00	00149	6820014F	A		BCR,2	$+5	NO, CC3 RESET
332	00	0014A	6520014B	A		BIR,2	$+1	NO, ERROR - INCREMENT ERROR COUNT
333	00	0014B	6C000010	A		RD,0	X'10'	
334	00	0014C	6910014E	A		BCS,1	$+2	SSW 4 SET
335	00	0014D	2E000000	A		WAIT		NO, HALT ON ERROR
336	00	0014E	6C000010	A		RD,0	X'10'	
337	00	0014F	69400143	A		BCS,4	BLK1	CHECK SSW 2 FOR LOOP/PROCEED
338						PAGE		
339					*			
340					* BLOCK 2			
341					*			
342					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 31 = 1			
343					*			
344	00	00150	6C000010	A	BLK2	RD,0	X'10'	
345	00	00151	68200153	A		BCR,2	$+2	
346	00	00152	2E000000	A		WAIT		REPORT
347	00	00153	32100977	A		LW,1	=2	
348	00	00154	32000975	A		LW,0	=0	RESET CC3 AND CC4
349	00	00155	32000976	A		LW,0	=1	
350	00	00156	69100158	A		BCS,1	$+2	CC4 SET
351	00	00157	6920015C	A		BCS,2	$+5	NO, CC3 SET
352	00	00158	65200159	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
353	00	00159	6C000010	A		RD,0	X'10'	
354	00	0015A	6910015C	A		BCS,1	$+2	
355	00	0015B	2E000000	A		WAIT		ERROR HALT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
356	00	0015C	6C000010	A		RD,0	X'10'	
357	00	0015D	69400150	A		BCS,4	BLK2	LOOP/PROCEED
358						PAGE		
359					*			
360					* BLOCK 3			
361					*			
362					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 30 = 1			
363					*			
364	00	0015E	6C000010	A	BLK3	RD,0	X'10'	
365	00	0015F	68200161	A		BCR,2	$+2	
366	00	00160	2E000000	A		WAIT		REPORT
367	00	00161	32100978	A		LW,1	=3	
368	00	00162	32000975	A		LW,0	=0	RESET CC3 AND CC4
369	00	00163	32000977	A		LW,0	=X'2'	
370	00	00164	69100166	A		BCS,1	$+2	CC4 SET
371	00	00165	6920016A	A		BCS,2	$+5	NO, CC3 SET
372	00	00166	65200167	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
373	00	00167	6C000010	A		RD,0	X'10'	
374	00	00168	6910016A	A		BCS,1	$+2	
375	00	00169	2E000000	A		WAIT		ERROR HALT
376	00	0016A	6C000010	A		RD,0	X'10'	
377	00	00169	6940015E	A		BCS,4	BLK3	LOOP/PROCEED
378						PAGE		
379					*			
380					* BLOCK 4			
381					*			
382					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 29 = 1			
383					*			
384	00	0016C	6C000010	A	BLK4	RD,0	X'10'	
385	00	0016D	6820016F	A		BCR,2	$+2	
386	00	0016E	2E000000	A		WAIT		REPORT
387	00	0016F	32100979	A		LW,1	=4	
388	00	00170	32000975	A		LW,0	=0	
389	00	00171	32000979	A		LW,0	=X'4'	
390	00	00172	69100174	A		BCS,1	$+2	CC4 SET
391	00	00173	320003D3	A		LW,0	979	
392	00	00174	69200179	A		BCS,2	$+5	NO, CC3 SET
393	00	00175	6C000010	A		RD,0	X'10'	
394	00	00176	69100178	A		BCS,1	$+2	
395	00	00177	2E000000	A		WAIT		ERROR HLAT
396	00	00178	6C000010	A		RD,0	X'10'	
397	00	00179	6940016C	A		BCS,4	BLK4	LOOP/PROCEED
398						PAGE		
399					*			
400					* BLOCK 5			
401					*			
402					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 28 = 1			
403					*			
404	00	0017A	6C000010	A	BLK5	RD,0	X'10'	
405	00	0017B	6820017D	A		BCR,2	$+2	
406	00	0017C	2E000000	A		WAIT		REPORT
407	00	0017D	3210097A	A		LW,1	=5	
408	00	0017E	32000975	A		LW,0	=0	
409	00	0017F	3200097B	A		LW,0	=X'8'	
410	00	00180	69100182	A		BCS,1	$+2	CC4 SET
411	00	00181	69200186	A		BCS,2	$+5	NO, CC3 SET
412	00	00182	65200183	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
413	00	00183	6C000010	A		RD,0	X'10'	
414	00	00184	69100186	A		BCS,1	$+2	
415	00	00185	2E000000	A		WAIT		ERROR HALT
416	00	00186	6C000010	A		RD,0	X'10'	
417	00	00187	6940017A	A		BCS,4	BLK5	LOOP/PROCEED
418						PAGE		
419					*			
420					* BLOCK 6			
421					*			
422					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 27 = 1			
423					*			
424	00	00188	6C000010	A	BLK6	RD,0	X'10'	
425	00	00189	6820018B	A		BCR,2	$+2	
426	00	0018A	2E000000	A		WAIT		REPORT
427	00	0018B	3210097C	A		LW,1	=6	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
428	00	001BC	32000075	A		LW,0	=0	
429	00	001BD	32000970	A		LW,0	=X'10'	
430	00	001BE	69100190	A		BCS,1	$+2	CC4 SET
431	00	001BF	69200194	A		BCS,2	$+5	NØ, CC3 SET
432	00	001C0	652001C1	A		BIR,2	$+1	ERRØR - CC3 RESET/CC4 SET
433	00	001C1	6C000010	A		RD,0	X'10'	
434	00	001C2	69100194	A		BCS,1	$+2	
435	00	001C3	2E000000	A		WAIT		ERRØR HALT
436	00	001C4	6C000010	A		RD,0	X'10'	
437	00	001C5	694001B8	A		BCS,4	BLK6	LØØP/PRØCEED
438						PAGE		
439					*			
440					* BLØCK 7			
441					*			
442					* CHECK ABILITY ØF LW TØ SET CC3 WITH BIT 26 = 1			
443					*			
444	00	001C6	6C000010	A	BLK7	RD,0	X'10'	
445	00	001C7	68200199	A		BCR,2	$+2	
446	00	001C8	2E000000	A		WAIT		REPØRT
447	00	001C9	32100978	A		LW,1	=7	
448	00	001CA	32000975	A		LW,0	=0	
449	00	001CB	3200097F	A		LW,0	=X'20'	
450	00	001CC	6910019E	A		BCS,1	$+2	CC4 SET
451	00	001CD	692001A2	A		BCS,2	$+5	NØ, CC3 SET
452	00	001CE	652001CF	A		BIR,2	$+1	ERRØR - CC3 RESET/CC4 SET
453	00	001CF	6C000010	A		RD,0	X'10'	
454	00	001D0	691001A2	A		BCS,1	$+2	
455	00	001D1	2E000000	A		WAIT		ERRØR HALT
456	00	001D2	6C000010	A		RD,0	X'10'	
457	00	001D3	694001B6	A		BCS,4	BLK7	LØØP/PRØCEED
458						PAGE		
459					*			
460					* BLØCK 8			
461					*			
462					* CHECK ABILITY ØF LW TØ SET CC3 WITH BIT 25 =1			
463					*			
464	00	001A4	6C000010	A	BLK8	RD,0	X'10'	
465	00	001A5	682001A7	A		BCR,2	$+2	
466	00	001A6	2E000000	A		WAIT		REPØRT
467	00	001A7	32100978	A		LW,1	=8	
468	00	001A8	32000975	A		LW,0	=0	
469	00	001A9	32000980	A		LW,0	=X'40'	
470	00	001AA	691001AC	A		BCS,1	$+2	CC4 SET
471	00	001AB	692001B0	A		BCS,2	$+5	NØ, CC3 SET
472	00	001AC	652001AD	A		BIR,2	$+1	ERRØR - CC3 RESET/CC4 SET
473	00	001AD	6C000010	A		RD,0	X'10'	
474	00	001AE	691001B0	A		BCS,1	$+2	
475	00	001AF	2E000000	A		WAIT		ERRØR HALT
476	00	001B0	6C000010	A		RD,0	X'10'	
477	00	001B1	694001A4	A		BCS,4	BLK8	LØØP/PRØCEED
478						PAGE		
479					*			
480					* BLØCK 9			
481					*			
482					* CHECK ABILITY ØF LW TØ SET CC3 WITH BIT 24 = 1			
483					*			
484	00	001B2	6C000010	A	BLK9	RD,0	X'10'	
485	00	001B3	682001B5	A		BCR,2	$+2	
486	00	001B4	2E000000	A		WAIT		REPØRT
487	00	001B5	32100981	A		LW,1	=9	
488	00	001B6	32000975	A		LW,0	=0	
489	00	001B7	32000982	A		LW,0	=X'80'	
490	00	001B8	691001BA	A		BCS,1	$+2	CC4 SET
491	00	001B9	692001BE	A		BCS,2	$+5	NØ, CC3 SET
492	00	001BA	652001BB	A		BIR,2	$+1	ERRØR - CC3 RESET/CC4 SET
493	00	001BB	6C000010	A		RD,0	X'10'	
494	00	001BC	6910018E	A		BCS,1	$+2	
495	00	001BD	2E000000	A		WAIT		ERRØR HALT
496	00	001BE	6C000010	A		RD,0	X'10'	
497	00	001BF	694001B2	A		BCS,4	BLK9	LØØP/PRØCEED
498						PAGE		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
499					*			
500					* BLOCK 10			
501					*			
502					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 23 = 1			
503					*			
504	00	001C0	6C000010	A	BLK10	RD,0	X'10'	
505	00	001C1	682001C3	A		BCR,2	*+2	
506	00	001C2	2E000000	A		WAIT		REPORT
507	00	001C3	3210097D	A		LW,1	=X'110'	
508	00	001C4	32000975	A		LW,0	=0	
509	00	001C5	32000983	A		LW,0	=X'100'	
510	00	001C6	691001C8	A		BCS,1	*+2	CC4 SET
511	00	001C7	692001CC	A		BCS,2	*+5	NO, CC3 SET
512	00	001C8	652001C9	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
513	00	001C9	6C000010	A		RD,0	X'10'	
514	00	001CA	691001CC	A		BCS,1	*+2	
515	00	001CB	2E000000	A		WAIT		ERROR HALT
516	00	001CC	6C000010	A		RD,0	X'10'	
517	00	001CD	694001C0	A		BCS,4	BLK10	LOOP/PROCEED
518						PAGE		
519					*			
520					* BLOCK 11			
521					*			
522					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 22 = 1			
523					*			
524	00	001CE	6C000010	A	BLK11	RD,0	X'10'	
525	00	001CF	682001D1	A		BCR,2	*+2	
526	00	001D0	2E000000	A		WAIT		REPORT
527	00	001D1	32100984	A		LW,1	=X'111'	
528	00	001D2	32000975	A		LW,0	=0	
529	00	001D3	32000985	A		LW,0	=X'200'	
530	00	001D4	691001D6	A		BCS,1	*+2	CC4 SET
531	00	001D5	692001DA	A		BCS,2	*+5	NO, CC3 SET
532	00	001D6	652001D7	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
533	00	001D7	6C000010	A		RD,0	X'10'	
534	00	001D8	691001DA	A		BCS,1	*+2	
535	00	001D9	2E000000	A		WAIT		ERROR HALT
536	00	001DA	6C000010	A		RD,0	X'10'	
537	00	001DB	694001CE	A		BCS,4	BLK11	LOOP/PROCEED
538						PAGE		
539					*			
540					* BLOCK 12			
541					*			
542					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 21 = 1			
543					*			
544	00	001DC	6C000010	A	BLK12	RD,0	X'10'	
545	00	001DD	682001DF	A		BCR,2	*+2	
546	00	001DE	2E000000	A		WAIT		REPORT
547	00	001DF	32100986	A		LW,1	=X'112'	
548	00	001E0	32000975	A		LW,0	=0	
549	00	001E1	32000987	A		LW,0	=X'400'	
550	00	001E2	691001E4	A		BCS,1	*+2	CC4 SET
551	00	001E3	692001E8	A		BCS,2	*+5	NO, CC3 SET
552	00	001E4	652001E5	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
553	00	001E5	6C000010	A		RD,0	X'10'	
554	00	001E6	691001E8	A		BCS,1	*+2	
555	00	001E7	2E000000	A		WAIT		ERROR HALT
556	00	001E8	6C000010	A		RD,0	X'10'	
557	00	001E9	694001DC	A		BCS,4	BLK12	LOOP/PROCEED
558						PAGE		
559					*			
560					* BLOCK 13			
561					*			
562					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 20 = 1			
563					*			
564	00	001EA	6C000010	A	BLK13	RD,0	X'10'	
565	00	001EB	682001ED	A		BCR,2	*+2	
566	00	001EC	2E000000	A		WAIT		REPORT
567	00	001ED	32100988	A		LW,1	=X'113'	
568	00	001EE	32000975	A		LW,0	=0	
569	00	001EF	32000989	A		LW,0	=X'800'	
570	00	001F0	691001F2	A		BCS,1	*+2	CC4 SET

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
571	00	001F1	692001F6	A		BCS,2	*+5	NO, CC3 SET
572	00	001F2	652001F3	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
573	00	001F3	6C000010	A		RD,0	X'10'	
574	00	001F4	691001F6	A		BCS,1	*+2	
575	00	001F5	2E000000	A		WAIT		ERROR HALT
576	00	001F6	6C000010	A		RD,0	X'10'	
577	00	001F7	694001EA	A		BCS,4	BLK13	LOOP/PROCEED
578						PAGE		
579					*			
580					* BLOCK 14			
581					*			
582					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 19 = 1			
583					*			
584	00	001F8	6C000010	A	BLK14	RD,0	X'10'	
585	00	001F9	682001FB	A		BCR,2	*+2	
586	00	001FA	2E000000	A		WAIT		REPORT
587	00	001FB	3210098A	A		LW,1	=X'14'	
588	00	001FC	32000975	A		LW,0	=0	
589	00	001FD	3200098B	A		LW,0	=X'10000'	
590	00	001FE	69100200	A		BCS,1	*+2	CC4 SET
591	00	001FF	69200204	A		BCS,2	*+5	NO, CC3 SET
592	00	00200	65200201	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
593	00	00201	6C000010	A		RD,0	X'10'	
594	00	00202	69100204	A		BCS,1	*+2	
595	00	00203	2E000000	A		WAIT		ERROR HALT
596	00	00204	6C000010	A		RD,0	X'10'	
597	00	00205	694001F8	A		BCS,4	BLK14	LOOP/PROCEED
598						PAGE		
599					*			
600					* BLOCK 15			
601					*			
602					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 18 = 1			
603					*			
604	00	00206	6C000010	A	BLK15	RD,0	X'10'	
605	00	00207	68200209	A		BCR,2	*+2	
606	00	00208	2E000000	A		WAIT		REPORT
607	00	00209	3210098C	A		LW,1	=X'15'	
608	00	0020A	32000975	A		LW,0	=0	
609	00	0020B	3200098D	A		LW,0	=X'20000'	
610	00	0020C	6910020E	A		BCS,1	*+2	CC4 SET
611	00	0020D	69200212	A		BCS,2	*+5	NO, CC3 SET
612	00	0020E	6520020F	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
613	00	0020F	6C000010	A		RD,0	X'10'	
614	00	00210	69100212	A		BCS,1	*+2	
615	00	00211	2E000000	A		WAIT		ERROR HALT
616	00	00212	6C000010	A		RD,0	X'10'	
617	00	00213	69400206	A		BCS,4	BLK15	LOOP/PROCEED
618						PAGE		
619					*			
620					* BLOCK 16			
621					*			
622					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 17 = 1			
623					*			
624	00	00214	6C000010	A	BLK16	RD,0	X'10'	
625	00	00215	68200217	A		BCR,2	*+2	
626	00	00216	2E000000	A		WAIT		REPORT
627	00	00217	3210098E	A		LW,1	=X'16'	
628	00	00218	32000975	A		LW,0	=0	
629	00	00219	3200098F	A		LW,0	=X'40000'	
630	00	0021A	6910021C	A		BCS,1	*+2	CC4 SET
631	00	0021B	69200220	A		BCS,2	*+5	NO, CC3 SET
632	00	0021C	6520021D	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
633	00	0021D	6C000010	A		RD,0	X'10'	
634	00	0021E	69100220	A		BCS,1	*+2	
635	00	0021F	2E000000	A		WAIT		ERROR HALT
636	00	00220	6C000010	A		RD,0	X'10'	
637	00	00221	69400214	A		BCS,4	BLK16	LOOP/PROCEED
638						PAGE		
639					*			
640					* BLOCK 17			
641					*			
642					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 16 = 1			

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND          COMMENTS
643                                                                       *
644       00            00022           6C000010         A       BLK17    RD,0       X'10'
645       00            00023           68200225         A                BCR,2      $+2
646       00            00024           2E000000         A                WAIT                        REPORT
647       00            00025           32100990         A                LW,1       =X'17'
648       00            00026           32000975         A                LW,0       =0
649       00            00027           32000991         A                LW,0       =X'8000'
650       00            00028           6910022A         A                BCS,1      $+2              CC4 SET
651       00            00029           6920022E         A                BCS,2      $+5              NO, CC3 SET
652       00            0002A           65200226         A                BIR,2      $+1              ERROR - CC3 RESET/CC4 SET
653       00            0002B           6C000010         A                RD,0       X'10'
654       00            0002C           6910022E         A                BCS,1      $+2
655       00            0002D           2E000000         A                WAIT                        ERROR HALT
656       00            0002E           6C000010         A                RD,0       X'10'
657       00            0002F           69400222         A                BCS,4      BLK17            LOOP/PROCEED
658                                                                       PAGE
659                                                                       *
660                                                                       * BLOCK 18
661                                                                       *
662                                                                       * CHECK ABILITY OF LW TO SET CC3 WITH BIT 15 = 1
663                                                                       *
664       00            00030           6C000010         A       BLK18    RD,0       X'10'
665       00            00031           68200233         A                BCR,2      $+2
666       00            00032           2E000000         A                WAIT                        REPORT
667       00            00033           32100992         A                LW,1       =X'18'
668       00            00034           32000975         A                LW,0       =0
669       00            00035           32000993         A                LW,0       =X'10000'
670       00            00036           69100238         A                BCS,1      $+2              CC4 SET
671       00            00037           6920023C         A                BCS,2      $+5              NO, CC3 SET
672       00            00038           65200239         A                BIR,2      $+1              ERROR - CC3 RESET/CC4 SET
673       00            00039           6C000010         A                RD,0       X'10'
674       00            0003A           6910023C         A                BCS,1      $+2
675       00            0003B           2E000000         A                WAIT                        ERROR HALT
676       00            0003C           6C000010         A                RD,0       X'10'
677       00            0003D           69400230         A                BCS,4      BLK18            LOOP/PROCEED
678                                                                       PAGE
679                                                                       *
680                                                                       * BLOCK 19
681                                                                       *
682                                                                       * CHECK ABILITY OF LW TO SET CC3 WITH BIT 14 = 1
683                                                                       *
684       00            0023E           6C000010         A       BLK19    RD,0       X'10'
685       00            0023F           68200241         A                BCR,2      $+2
686       00            00240           2E000000         A                WAIT                        REPORT
687       00            00241           32100994         A                LW,1       =X'19'
688       00            00242           32000975         A                LW,0       =0
689       00            00243           32000995         A                LW,0       =X'20000'
690       00            00244           69100246         A                BCS,1      $+2              CC4 SET
691       00            00245           6920024A         A                BCS,2      $+5              NO, CC3 SET
692       00            00246           65200247         A                BIR,2      $+1              ERROR - CC3 RESET/CC4 SET
693       00            00247           6C000010         A                RD,0       X'10'
694       00            00248           6910024A         A                BCS,1      $+2
695       00            00249           2E000000         A                WAIT                        ERROR HALT
696       00            0024A           6C000010         A                RD,0       X'10'
697       00            0024B           6940023E         A                BCS,4      BLK19            LOOP/PROCEED
698                                                                       PAGE
699                                                                       *
700                                                                       * BLOCK 20
701                                                                       *
702                                                                       * CHECK ABILITY OF LW TO SET CC3 WITH BIT 13 = 1
703                                                                       *
704       00            0024C           6C000010         A       BLK20    RD,0       X'10'
705       00            0024D           6820024F         A                BCR,2      $+2
706       00            0024E           2E000000         A                WAIT                        REPORT
707       00            0024F           3210097F         A                LW,1       =X'20'
708       00            00250           32000975         A                LW,0       =0
709       00            00251           32000996         A                LW,0       =X'40000'
710       00            00252           69100254         A                BCS,1      $+2              CC4 SET
711       00            00253           69200258         A                BCS,2      $+5              NO, CC3 SET
712       00            00254           65200255         A                BIR,2      $+1              ERROR - CC3 RESET/CC4 SET
713       00            00255           6C000010         A                RD,0       X'10'
714       00            00256           69100258         A                BCS,1      $+2
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
715	00	00257	2E000000	A		WAIT		ERROR HALT
716	00	00258	6C000010	A		RD,0	X'10'	
717	00	00259	6940024C	A		BCS,4	BLK20	LOOP/PROCEED
718						PAGE		
719					*			
720					* BLOCK 21			
721					*			
722					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 12 = 1			
723					*			
724	00	0025A	6C000010	A	BLK21	RD,0	X'10'	
725	00	0025B	6820025D	A		BCR,2	$+2	
726	00	0025C	2E000000	A		WAIT		REPORT
727	00	0025D	32100997	A		LW,1	=X'21'	
728	00	0025E	32000975	A		LW,0	=0	
729	00	0025F	32000998	A		LW,0	=X'80000'	
730	00	00260	69100262	A		BCS,1	$+2	CC4 SET
731	00	00261	69200266	A		BCS,2	$+5	NO, CC3 SET
732	00	00262	65200263	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
733	00	00263	6C000010	A		RD,0	X'10'	
734	00	00264	69100266	A		BCS,1	$+2	
735	00	00265	2E000000	A		WAIT		ERROR HALT
736	00	00266	6C000010	A		RD,0	X'10'	
737	00	00267	6940025A	A		BCS,4	BLK21	LOOP/PROCEED
738						PAGE		
739					*			
740					* BLOCK 22			
741					*			
742					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 11 = 1			
743					*			
744	00	00268	6C000010	A	BLK22	RD,0	X'10'	
745	00	00269	6820026B	A		BCR,2	$+2	
746	00	0026A	2E000000	A		WAIT		REPORT
747	00	0026B	32100999	A		LW,1	=X'22'	
748	00	0026C	32000975	A		LW,0	=0	
749	00	0026D	3200099A	A		LW,0	=X'100000'	
750	00	0026E	69100270	A		BCS,1	$+2	CC4 SET
751	00	0026F	69200274	A		BCS,2	$+5	NO, CC3 SET
752	00	00270	65200271	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
753	00	00271	6C000010	A		RD,0	X'10'	
754	00	00272	69100274	A		BCS,1	$+2	
755	00	00273	2E000000	A		WAIT		ERROR HALT
756	00	00274	6C000010	A		RD,0	X'10'	
757	00	00275	69400268	A		BCS,4	BLK22	LOOP/PROCEED
758						PAGE		
759					*			
760					* BLOCK 23			
761					*			
762					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 10 = 1			
763					*			
764	00	00276	6C000010	A	BLK23	RD,0	X'10'	
765	00	00277	68200279	A		BCR,2	$+2	
766	00	00278	2E000000	A		WAIT		REPORT
767	00	00279	3210099B	A		LW,1	=X'23'	
768	00	0027A	32000975	A		LW,0	=0	
769	00	0027B	3200099C	A		LW,0	=X'200000'	
770	00	0027C	6910027E	A		BCS,1	$+2	CC4 SET
771	00	0027D	69200282	A		BCS,2	$+5	NO, CC3 SET
772	00	0027E	6520027F	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
773	00	0027F	6C000010	A		RD,0	X'10'	
774	00	00280	69100282	A		BCS,1	$+2	
775	00	00281	2E000000	A		WAIT		ERROR HALT
776	00	00282	6C000010	A		RD,0	X'10'	
777	00	00283	69400276	A		BCS,4	BLK23	LOOP/PROCEED
778						PAGE		
779					*			
780					* BLOCK 24			
781					*			
782					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 9 = 1			
783					*			
784	00	00284	6C000010	A	BLK24	RD,0	X'10'	
785	00	00285	68200287	A		BCR,2	$+2	
786	00	00286	2E000000	A		WAIT		REPORT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
787	00	002B7	32100299	A		LW,1	=X'24'	
788	00	002B8	32000975	A		LW,0	=0	
789	00	002B9	320009AE	A		LW,0	=X'4000000'	
790	00	002BA	691002BC	A		BCS,1	$+2	CC4 SET
791	00	002BB	692002C0	A		BCS,2	$+5	NA, CC3 SET
792	00	002BC	652002BD	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
793	00	002BD	6C000010	A		RD,0	X'10'	
794	00	002BE	691002C0	A		BCS,1	$+2	
795	00	002BF	2E000000	A		WAIT		ERROR HALT
796	00	002C0	6C000010	A		RD,0	X'10'	
797	00	002C1	694002B4	A		BCS,4	BLK24	LOOP/PROCEED
798						PAGE		
799					* BLOCK 25			
800					*			
801					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 8 = 1			
802					*			
803					*			
804	00	002C2	6C000010	A	BLK25	RD,0	X'10'	
805	00	002C3	6A2002C5	A		BCR,2	$+2	
806	00	002C4	2E000000	A		WAIT		REPORT
807	00	002C5	32100299	A		LW,1	=X'25'	
808	00	002C6	32000975	A		LW,0	=0	
809	00	002C7	320009A0	A		LW,0	=X'8000000'	
810	00	002C8	691002CA	A		BCS,1	$+2	CC4 SET
811	00	002C9	692002CE	A		BCS,2	$+5	NA, CC3 SET
812	00	002CA	652002C8	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
813	00	002CB	6C000010	A		RD,0	X'10'	
814	00	002CC	691002CE	A		BCS,1	$+2	
815	00	002CD	2E000000	A		WAIT		ERROR HALT
816	00	002CE	6C000010	A		RD,0	X'10'	
817	00	002CF	694002B2	A		BCS,4	BLK25	LOOP/PROCEED
818						PAGE		
819					*			
820					* BLOCK 26			
821					*			
822					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 7 = 1			
823					*			
824	00	002A0	6C000010	A	BLK26	RD,0	X'10'	
825	00	002A1	6A2002A3	A		BCR,2	$+2	
826	00	002A2	2E000000	A		WAIT		
827	00	002A3	321009A1	A		LW,1	=X'26'	
828	00	002A4	32000975	A		LW,0	=0	
829	00	002A5	320009A2	A		LW,0	=X'1000000'	
830	00	002A6	691002A8	A		BCS,1	$+2	CC4 SET
831	00	002A7	692002AC	A		BCS,2	$+5	NA, CC3 SET
832	00	002A8	652002A9	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
833	00	002A9	6C000010	A		RD,0	X'10'	
834	00	002AA	691002AC	A		BCS,1	$+2	
835	00	002AB	2E000000	A		WAIT		ERROR HALT
836	00	002AC	6C000010	A		RD,0	X'10'	
837	00	002AD	694002A0	A		BCS,4	BLK26	LOOP/PROCEED
838						PAGE		
839					*			
840					* BLOCK 27			
841					*			
842					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 6 = 1			
843					*			
844	00	002AE	6C000010	A	BLK27	RD,0	X'10'	
845	00	002AF	682002B1	A		BCR,2	$+2	
846	00	002B0	2E000000	A		WAIT		REPORT
847	00	002B1	321009A3	A		LW,1	=X'27'	
848	00	002B2	32000975	A		LW,0	=0	
849	00	002B3	320009A4	A		LW,0	=X'2000000'	
850	00	002B4	691002B6	A		BCS,1	$+2	CC4 SET
851	00	002B5	692002BA	A		BCS,2	$+5	NA, CC3 SET
852	00	002B6	652002B7	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
853	00	002B7	6C000010	A		RD,0	X'10'	
854	00	002B8	691002BA	A		BCS,1	$+2	
855	00	002B9	2E000000	A		WAIT		ERROR HALT
856	00	002BA	6C000010	A		RD,0	X'10'	
857	00	002BB	694002AE	A		BCS,4	BLK27	LOOP/PROCEED
858						PAGE		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
859					*			
860					* BLOCK 28			
861					*			
862					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 5 = 1			
863					*			
864	00	002BC	6C000010	A	BLK28	RD,0	X'10'	
865	00	002BD	682002BF	A		BCR,2	$+2	
866	00	002BE	2E000000	A		WAIT		
867	00	002BF	321009A5	A		LW,1	=X'28'	
868	00	002C0	32000975	A		LW,0	=0	
869	00	002C1	320009A6	A		LW,0	=X'40000000'	
870	00	002C2	691002C4	A		BCS,1	$+2	CC4 SET
871	00	002C3	692002C8	A		BCS,2	$+5	NO, CC3 SET
872	00	002C4	652002C5	A		BIR,2	$+1	ERROR = CC3 RESET/CC4 SET
873	00	002C5	6C000010	A		RD,0	X'10'	
874	00	002C6	691002C8	A		BCS,1	$+2	
875	00	002C7	2E000000	A		WAIT		ERROR HALT
876	00	002C8	6C000010	A		RD,0	X'10'	
877	00	002C9	694002BC	A		BCS,4	BLK28	LOOP/PROCEED
878						PAGE		
879					*			
880					* BLOCK 29			
881					*			
882					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 4 = 1			
883					*			
884	00	002CA	6C000010	A	BLK29	RD,0	X'10'	
885	00	002CB	682002CD	A		BCR,2	$+2	
886	00	002CC	2E000000	A		WAIT		REPORT
887	00	002CD	321009A7	A		LW,1	=X'29'	
888	00	002CE	32000975	A		LW,0	=0	
889	00	002CF	320009A8	A		LW,0	=X'80000000'	
890	00	002D0	691002D2	A		BCS,1	$+2	CC4 SET
891	00	002D1	692002D6	A		BCS,2	$+5	NO, CC3 SET
892	00	002D2	652002D3	A		BIR,2	$+1	ERROR = CC3 RESET/CC4 SET
893	00	002D3	6C000010	A		RD,0	X'10'	
894	00	002D4	691002D6	A		BCS,1	$+2	
895	00	002D5	2E000000	A		WAIT		ERROR HALT
896	00	002D6	6C000010	A		RD,0	X'10'	
897	00	002D7	694002CA	A		BCS,4	BLK29	LOOP/PROCEED
898						PAGE		
899					*			
900					* BLOCK 30			
901					*			
902					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 3 = 1			
903					*			
904	00	002D8	6C000010	A	BLK30	RD,0	X'10'	
905	00	002D9	682002DB	A		BCR,2	$+2	
906	00	002DA	2E000000	A		WAIT		REPORT
907	00	002DB	321009A9	A		LW,1	=X'30'	
908	00	002DC	32000975	A		LW,0	=0	
909	00	002DD	320009AA	A		LW,0	=X'10000000'	
910	00	002DE	691002E0	A		BCS,1	$+2	CC4 SET
911	00	002DF	692002E4	A		BCS,2	$+5	NO, CC3 SET
912	00	002E0	652002E1	A		BIR,2	$+1	ERROR = CC3 RESET/CC4 SET
913	00	002E1	6C000010	A		RD,0	X'10'	
914	00	002E2	691002E4	A		BCS,1	$+2	
915	00	002E3	2E000000	A		WAIT		ERROR HALT
916	00	002E4	6C000010	A		RD,0	X'10'	
917	00	002E5	694002D8	A		BCS,4	BLK30	LOOP/PROCEED
918						PAGE		
919					*			
920					* BLOCK 31			
921					*			
922					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 2 = 1			
923					*			
924	00	002E6	6C000010	A	BLK31	RD,0	X'10'	
925	00	002E7	682002E9	A		BCR,2	$+2	
926	00	002E8	2E000000	A		WAIT		REPORT
927	00	002E9	321009AB	A		LW,1	=X'31'	
928	00	002EA	32000975	A		LW,0	=0	
929	00	002EB	320009AC	A		LW,0	=X'20000000'	
930	00	002EC	691002EE	A		BCS,1	$+2	CC4 SET

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
931	00	002ED	692002F2	A		BCS,2	$+5	NO, CC3 SET
932	00	002EE	652002EF	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
933	00	002EF	6C000010	A		RD,0	X'10'	
934	00	002F0	691002F2	A		BCS,1	$+2	
935	00	002F1	2E000000	A		WAIT		ERROR HALT
936	00	002F2	6C000010	A		RD,0	X'10'	
937	00	002F3	694002E6	A		BCS,4	BLK31	LOOP/PROCEED
938						PAGE		
939					*			
940					* BLOCK 32			
941					*			
942					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 1 = 1			
943					*			
944	00	002F4	6C000010	A	BLK32	RD,0	X'10'	
945	00	002F5	682002F7	A		BCR,2	$+2	
946	00	002F6	2E000000	A		WAIT		REPORT
947	00	002F7	321009AD	A		LW,1	=X'32'	
948	00	002F8	32000975	A		LW,0	=0	
949	00	002F9	320009AE	A		LW,0	=X'40000000'	
950	00	002FA	691002FC	A		BCS,1	$+2	CC4 SET
951	00	002FB	69200300	A		BCS,2	$+5	NO, CC3 SET
952	00	002FC	652002FD	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
953	00	002FD	6C000010	A		RD,0	X'10'	
954	00	002FE	69100300	A		BCS,1	$+2	
955	00	002FF	2E000000	A		WAIT		ERROR HALT
956	00	00300	6C000010	A		RD,0	X'10'	
957	00	00301	694002F4	A		BCS,4	BLK32	LOOP/PROCEED
958						PAGE		
959					*			
960					* BLOCK 33			
961					*			
962					* CHECK ABILITY OF LW TO SET CC4 WITH BIT 0 = 1			
963					*			
964	00	00302	6C000010	A	BLK33	RD,0	X'10'	
965	00	00303	68200305	A		BCR,2	$+2	
966	00	00304	2E000000	A		WAIT		REPORT
967	00	00305	321009AF	A		LW,1	=X'33'	
968	00	00306	32000975	A		LW,0	=0	
969	00	00307	320009B0	A		LW,0	=X'80000000'	
970	00	00308	6810030A	A		BCR,1	$+2	CC4 SET
971	00	00309	6820030E	A		BCR,2	$+5	YES, CC3 SET
972	00	0030A	6520030B	A		BIR,2	$+1	ERROR - CC3 SET/CC4 RESET
973	00	0030B	6C000010	A		RD,0	X'10'	
974	00	0030C	6910030E	A		BCS,1	$+2	
975	00	0030D	2E000000	A		WAIT		ERROR HALT
976	00	0030E	6C000010	A		RD,0	X'10'	
977	00	0030F	69400302	A		BCS,4	BLK33	LOOP/PROCEED
978						PAGE		
979					*			
980					* BLOCK 34			
981					*			
982					* CHECK ABILITY OF LW TO RESET CC4 WITH ALL BITS = ZERO			
983					*			
984	00	00310	6C000010	A	BLK34	RD,0	X'10'	
985	00	00311	68200313	A		BCR,2	$+2	
986	00	00312	2E000000	A		WAIT		REPORT
987	00	00313	321009B1	A		LW,1	=X'34'	
988	00	00314	320009B0	A		LW,0	=X'80000000'	
989	00	00315	32000975	A		LW,0	=0	
990	00	00316	69100318	A		BCS,1	$+2	CC4 SET
991	00	00317	6820031C	A		BCR,2	$+5	NO, CC3 SET
992	00	00318	65200319	A		BIR,2	$+1	YES, ERROR - CC3/CC4 SET
993	00	00319	6C000010	A		RD,0	X'10'	
994	00	0031A	6910031C	A		BCS,1	$+2	
995	00	0031B	2E000000	A		WAIT		ERROR HALT
996	00	0031C	6C000010	A		RD,0	X'10'	
997	00	0031D	69400310	A		BCS,4	BLK34	LOOP/PROCEED
998						PAGE		
999					*			
1000					* BLOCK 35			
1001					*			
1002					* CHECK ABILITY OF LW-ERR SEQUENCE TO RESET CC3 AND NOT SET CC4 WITH			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1003					*	ALL BITS = ZERO		
1004					*			
1005	00	0031E	6C000010	A	BLK35	RD,0	X'10'	
1006	00	0031F	68200321	A		BCR,2	$+2	
1007	00	00320	2E000000	A		WAIT		REPORT
1008	00	00321	321009B2	A		LW,1	=X'35'	
1009	00	00322	32000975	A		LW,0	=0	
1010	00	00323	48000975	A		EOR,0	=0	
1011	00	00324	69100326	A		BCS,1	$+2	CC4 SET
1012	00	00325	6820032A	A		BCR,2	$+5	NO, CC3 SET
1013	00	00326	65200327	A		BIR,2	$+1	YES, ERROR - CC3/CC4 SET
1014	00	00327	6C000010	A		RD,0	X'10'	
1015	00	00328	6910032A	A		BCS,1	$+2	
1016	00	00329	2E000000	A		WAIT		ERROR HALT
1017	00	0032A	6C000010	A		RD,0	X'10'	
1018	00	00328	6940031E	A		BCS,4	BLK35	LOOP/PROCEED
1019						PAGE		
1020					*			
1021					* BLOCK 36			
1022					*			
1023					* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 AND NOT SET CC3 WITH			
1024					*	ALL BITS = 1		
1025					*			
1026	00	0032C	6C000010	A	BLK36	RD,0	X'10'	
1027	00	0032D	6820032F	A		BCR,2	$+2	
1028	00	0032E	2E000000	A		WAIT		REPORT
1029	00	0032F	321009B3	A		LW,1	=X'36'	
1030	00	00330	32000975	A		LW,0	=0	
1031	00	00331	320009B4	A		LW,0	=-1	
1032	00	00332	480009B4	A		EOR,0	=-1	
1033	00	00333	69100335	A		BCS,1	$+2	CC4 SET
1034	00	00334	68200339	A		BCR,2	$+5	NO, CC3 SET
1035	00	00335	65200336	A		BIR,2	$+1	YES, ERROR - CC3/CC4 SET
1036	00	00336	6C000010	A		RD,0	X'10'	
1037	00	00337	69100339	A		BCS,1	$+2	
1038	00	00338	2E000000	A		WAIT		ERROR HALT
1039	00	00339	6C000010	A		RD,0	X'10'	
1040	00	0033A	6940032C	A		BCS,4	BLK36	LOOP/PROCEED
1041						PAGE		
1042					*			
1043					* BLOCK 37			
1044					*			
1045					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 31 = 1			
1046					*			
1047	00	0033B	6C000010	A	BLK37	RD,0	X'10'	
1048	00	0033C	6820033E	A		BCR,2	$+2	
1049	00	0033D	2E000000	A		WAIT		REPORT
1050	00	0033E	321009B5	A		LW,1	=X'37'	
1051	00	0033F	32000975	A		LW,0	=0	
1052	00	00340	48000976	A		EOR,0	=X'1'	
1053	00	00341	69100343	A		BCS,1	$+2	CC4 SET
1054	00	00342	69200347	A		BCS,2	$+5	NO, CC3 SET
1055	00	00343	65200344	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1056	00	00344	6C000010	A		RD,0	X'10'	
1057	00	00345	69100347	A		BCS,1	$+2	
1058	00	00346	2E000000	A		WAIT		ERROR HALT
1059	00	00347	6C000010	A		RD,0	X'10'	
1060	00	00348	6940033B	A		BCS,4	BLK37	LOOP/PROCEED
1061						PAGE		
1062					*			
1063					* BLOCK 38			
1064					*			
1065					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 30 = 1			
1066					*			
1067	00	00349	6C000010	A	BLK38	RD,0	X'10'	
1068	00	0034A	6820034C	A		BCR,2	$+2	
1069	00	0034B	2E000000	A		WAIT		REPORT
1070	00	0034C	321009B6	A		LW,1	=X'38'	
1071	00	0034D	32000975	A		LW,0	=0	
1072	00	0034E	48000977	A		EOR,0	=X'2'	
1073	00	0034F	69100351	A		BCS,1	$+2	CC4 SET
1074	00	00350	69200355	A		BCS,2	$+5	NO, CC3 SET

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1075	00	00351	65200352	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1076	00	00352	6C000010	A		RD,0	X'10'	
1077	00	00353	69100355	A		BCS,1	$+2	
1078	00	00354	2E000000	A		WAIT		ERROR HALT
1079	00	00355	6C000010	A		RD,0	X'10'	
1080	00	00356	69400349	A		BCS,4	BLK38	LOOP/PROCEED
1081						PAGE		
1082					*			
1083					* BLOCK 39			
1084					*			
1085					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 29 = 1			
1086					*			
1087	00	00357	6C000010	A	BLK39	RD,0	X'10'	
1088	00	00358	6820035A	A		BCR,2	$+2	
1089	00	00359	2E000000	A		WAIT		REPORT
1090	00	0035A	32100987	A		LW,1	=X'39'	
1091	00	0035B	32000975	A		LW,0	=0	
1092	00	0035C	48000979	A		EOR,0	=X'4'	
1093	00	0035D	6910035F	A		BCS,1	$+2	CC4 SET
1094	00	0035E	69200363	A		BCS,2	$+5	NO, CC3 SET
1095	00	0035F	65200360	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1096	00	00360	6C000010	A		RD,0	X'10'	
1097	00	00361	69100363	A		BCS,1	$+2	
1098	00	00362	2E000000	A		WAIT		ERROR HALT
1099	00	00363	6C000010	A		RD,0	X'10'	
1100	00	00364	69400357	A		BCS,4	BLK39	LOOP/PROCEED
1101						PAGE		
1102					*			
1103					* BLOCK 40			
1104					*			
1105					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 28 = 1			
1106					*			
1107	00	00365	6C000010	A	BLK40	RD,0	X'10'	
1108	00	00366	68200368	A		BCR,2	$+2	
1109	00	00367	2E000000	A		WAIT		REPORT
1110	00	00368	32100980	A		LW,1	=X'40'	
1111	00	00369	32000975	A		LW,0	=0	
1112	00	0036A	4800097B	A		EOR,0	=X'8'	
1113	00	0036B	6910036D	A		BCS,1	$+2	CC4 SET
1114	00	0036C	69200371	A		BCS,2	$+5	NO, CC3 SET
1115	00	0036D	6520036E	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1116	00	0036E	6C000010	A		RD,0	X'10'	
1117	00	0036F	69100371	A		BCS,1	$+2	
1118	00	00370	2E000000	A		WAIT		ERROR HALT
1119	00	00371	6C000010	A		RD,0	X'10'	
1120	00	00372	69400365	A		BCS,4	BLK40	LOOP/PROCEED
1121						PAGE		
1122					*			
1123					* BLOCK 41			
1124					*			
1125					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 27 = 1			
1126					*			
1127	00	00373	6C000010	A	BLK41	RD,0	X'10'	
1128	00	00374	68200376	A		BCR,2	$+2	
1129	00	00375	2E000000	A		WAIT		REPORT
1130	00	00376	32100988	A		LW,1	=X'41'	
1131	00	00377	32000975	A		LW,0	=0	
1132	00	00378	4800097D	A		EOR,0	=X'10'	
1133	00	00379	6910037B	A		BCS,1	$+2	CC4 SET
1134	00	0037A	6920037F	A		BCS,2	$+5	NO, CC3 SET
1135	00	0037B	6520037C	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1136	00	0037C	6C000010	A		RD,0	X'10'	
1137	00	0037D	6910037F	A		BCS,1	$+2	
1138	00	0037E	2E000000	A		WAIT		ERROR HALT
1139	00	0037F	6C000010	A		RD,0	X'10'	
1140	00	00380	69400373	A		BCS,4	BLK41	LOOP/PROCEED
1141						PAGE		
1142					*			
1143					* BLOCK 42			
1144					*			
1145					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 26 = 1			
1146					*			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1147	00	00381	6C000010	A	BLK42	RD,0	X'10'	
1148	00	00382	68200384	A		BCR,2	$+2	
1149	00	00383	2E000000	A		WAIT		REPORT
1150	00	00384	321009B9	A		LW,1	=X'42'	
1151	00	00385	32000975	A		LW,0	=0	
1152	00	00386	4800097F	A		EOR,0	=X'20'	
1153	00	00387	69100389	A		BCS,1	$+2	CC4 SET
1154	00	00388	6920038D	A		BCS,2	$+5	NO, CC3 SET
1155	00	00389	6520038A	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1156	00	0038A	6C000010	A		RD,0	X'10'	
1157	00	0038B	6910038D	A		BCS,1	$+2	
1158	00	0038C	2E000000	A		WAIT		ERROR HALT
1159	00	0038D	6C000010	A		RD,0	X'10'	
1160	00	0038E	69400381	A		BCS,4	BLK42	LOOP/PROCEED
1161						PAGE		
1162					*			
1163					* BLOCK 43			
1164					*			
1165					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 25 = 1			
1166					*			
1167	00	0038F	6C000010	A	BLK43	RD,0	X'10'	
1168	00	00390	68200392	A		BCR,2	$+2	
1169	00	00391	2E000000	A		WAIT		REPORT
1170	00	00392	321009BA	A		LW,1	=X'43'	
1171	00	00393	32000975	A		LW,0	=0	
1172	00	00394	48000980	A		EOR,0	=X'40'	
1173	00	00395	69100397	A		BCS,1	$+2	CC4 SET
1174	00	00396	6920039B	A		BCS,2	$+5	NO, CC3 SET
1175	00	00397	65200398	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1176	00	00398	6C000010	A		RD,0	X'10'	
1177	00	00399	6910039B	A		BCS,1	$+2	
1178	00	0039A	2E000000	A		WAIT		ERROR HALT
1179	00	0039B	6C000010	A		RD,0	X'10'	
1180	00	0039C	6940038F	A		BCS,4	BLK43	LOOP/PROCEED
1181						PAGE		
1182					*			
1183					* BLOCK 44			
1184					*			
1185					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 24 = 1			
1186					*			
1187	00	0039D	6C000010	A	BLK44	RD,0	X'10'	
1188	00	0039E	682003A0	A		BCR,2	$+2	
1189	00	0039F	2E000000	A		WAIT		REPORT
1190	00	003A0	321009BB	A		LW,1	=X'44'	
1191	00	003A1	32000975	A		LW,0	=0	
1192	00	003A2	48000982	A		EOR,0	=X'80'	
1193	00	003A3	691003A5	A		BCS,1	$+2	CC4 SET
1194	00	003A4	692003A9	A		BCS,2	$+5	NO, CC3 SET
1195	00	003A5	652003A6	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1196	00	003A6	6C000010	A		RD,0	X'10'	
1197	00	003A7	691003A9	A		BCS,1	$+2	
1198	00	003A8	2E000000	A		WAIT		ERROR HALT
1199	00	003A9	6C000010	A		RD,0	X'10'	
1200	00	003AA	6940039D	A		BCS,4	BLK44	LOOP/PROCEED
1201						PAGE		
1202					*			
1203					* BLOCK 45			
1204					*			
1205					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 23 = 1			
1206					*			
1207	00	003AB	6C000010	A	BLK45	RD,0	X'10'	
1208	00	003AC	682003AE	A		BCR,2	$+2	
1209	00	003AD	2E000000	A		WAIT		REPORT
1210	00	003AE	321009BC	A		LW,1	=X'45'	
1211	00	003AF	32000975	A		LW,0	=0	
1212	00	003B0	48000983	A		EOR,0	=X'100'	
1213	00	003B1	691003B3	A		BCS,1	$+2	CC4 SET
1214	00	003B2	692003B7	A		BCS,2	$+5	NO, CC3 SET
1215	00	003B3	652003B4	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1216	00	003B4	6C000010	A		RD,0	X'10'	
1217	00	003B5	691003B7	A		BCS,1	$+2	
1218	00	003B6	2E000000	A		WAIT		ERROR HALT

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND      COMMENTS
1219      00            003B7           6C000010         A                 RD,0     X'10'
1220      00            003B8           694003AB         A                 BCS,4    BLK45        LOOP/PROCEED
1221                                                                       PAGE
1222                                                      *
1223                                                      * BLOCK 46
1224                                                      *
1225                                                      * CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 22 = 1
1226                                                      *
1227      00            003B9           6C000010         A       BLK46     RD,0     X'10'
1228      00            003BA           682003BC         A                 BCR,2    $+2
1229      00            003BB           2E000000         A                 WAIT                  REPORT
1230      00            003BC           321009BD         A                 LW,1     =X'46'
1231      00            003BD           32000975         A                 LW,0     =0
1232      00            003BE           480009B5         A                 EOR,0    =X'200'
1233      00            003BF           691003C1         A                 BCS,1    $+2          CC4 SET
1234      00            003C0           692003C5         A                 BCS,2    $+5          NO, CC3 SET
1235      00            003C1           652003C2         A                 BIR,2    $+1          ERROR - CC3 RESET/CC4 SET
1236      00            003C2           6C000010         A                 RD,0     X'10'
1237      00            003C3           691003C5         A                 BCS,1    $+2
1238      00            003C4           2E000000         A                 WAIT                  ERROR HALT
1239      00            003C5           6C000010         A                 RD,0     X'10'
1240      00            003C6           694003B9         A                 BCS,4    BLK46        LOOP/PROCEED
1241                                                                       PAGE
1242                                                      *
1243                                                      * BLOCK 47
1244                                                      *
1245                                                      * CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 21 = 1
1246                                                      *
1247      00            003C7           6C000010         A       BLK47     RD,0     X'10'
1248      00            003C8           682003CA         A                 BCR,2    $+2
1249      00            003C9           2E000000         A                 WAIT                  REPORT
1250      00            003CA           321009BE         A                 LW,1     =X'47'
1251      00            003CB           32000975         A                 LW,0     =0
1252      00            003CC           48000987         A                 EOR,0    =X'400'
1253      00            003CD           691003CF         A                 BCS,1    $+2          CC4 SET
1254      00            003CE           692003D3         A                 BCS,2    $+5          NO, CC3 SET
1255      00            003CF           652003D0         A                 BIR,2    $+1          ERROR - CC3 RESET/CC4 SET
1256      00            003D0           6C000010         A                 RD,0     X'10'
1257      00            003D1           691003D3         A                 BCS,1    $+2
1258      00            003D2           2E000000         A                 WAIT                  ERROR HALT
1259      00            003D3           6C000010         A                 RD,0     X'10'
1260      00            003D4           694003C7         A                 BCS,4    BLK47        LOOP/PROCEED
1261                                                                       PAGE
1262                                                      *
1263                                                      * BLOCK 48
1264                                                      *
1265                                                      * CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 20 = 1
1266                                                      *
1267      00            003D5           6C000010         A       BLK48     RD,0     X'10'
1268      00            003D6           682003D8         A                 BCR,2    $+2
1269      00            003D7           2E000000         A                 WAIT                  REPORT
1270      00            003D8           321009BF         A                 LW,1     =X'48'
1271      00            003D9           32000975         A                 LW,0     =0
1272      00            003DA           48000989         A                 EOR,0    =X'800'
1273      00            003DB           691003DD         A                 BCS,1    $+2          CC4 SET
1274      00            003DC           692003E1         A                 BCS,2    $+5          NO, CC3 SET
1275      00            003DD           652003DE         A                 BIR,2    $+1          ERROR - CC3 RESET/CC4 SET
1276      00            003DE           6C000010         A                 RD,0     X'10'
1277      00            003DF           691003E1         A                 BCS,1    $+2
1278      00            003E0           2E000000         A                 WAIT                  ERROR HALT
1279      00            003E1           6C000010         A                 RD,0     X'10'
1280      00            003E2           694003D5         A                 BCS,4    BLK48        LOOP/PROCEED
1281                                                                       PAGE
1282                                                      *
1283                                                      * BLOCK 49
1284                                                      *
1285                                                      * CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 19 = 1
1286                                                      *
1287      00            003E3           6C000010         A       BLK49     RD,0     X'10'
1288      00            003E4           682003E6         A                 BCR,2    $+2
1289      00            003E5           2E000000         A                 WAIT                  REPORT
1290      00            003E6           321009C0         A                 LW,1     =X'49'
```

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LINE  MEM PROT  MEMORY    MEMORY     ABS OR REL ORIG  LABEL   OPERATION  OPERAND      COMMENTS
NO.   KEY       ADDRESS   CONTENTS
1291  00        003E7     32000975   A                       LW,0       *0
1292  00        003E8     4800098B   A                       EOR,0      *X'1000'
1293  00        003E9     691003EB   A                       BCS,1      *+2          CC4 SET
1294  00        003EA     692003EF   A                       BCS,2      *+5          NO, CC3 SET
1295  00        003EB     652003EC   A                       BIR,2      *+1          ERROR - CC3 RESET/CC4 SET
1296  00        003EC     6C000010   A                       RD,0       X'10'
1297  00        003ED     691003EF   A                       BCS,1      *+2
1298  00        003EE     2E000000   A                       WAIT                    ERROR HALT
1299  00        003EF     6C000010   A                       RD,0       X'10'
1300  00        003F0     694003E3   A                       BCS,4      BLK49        LOOP/PROCEED
1301                                                        PAGE
1302                                                *
1303                                                * BLOCK 50
1304                                                *
1305                                                * CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 18 = 1
1306                                                *
1307  00        003F1     6C000010   A       BLK50    RD,0       X'10'
1308  00        003F2     682003F4   A                BCR,2      *+2
1309  00        003F3     2E000000   A                WAIT                    REPORT
1310  00        003F4     321009C1   A                LW,1       *X'50'
1311  00        003F5     32000975   A                LW,0       *0
1312  00        003F6     4800098D   A                EOR,0      *X'2000'
1313  00        003F7     691003F9   A                BCS,1      *+2          CC4 SET
1314  00        003F8     692003FD   A                BCS,2      *+5          NO, CC3 SET
1315  00        003F9     652003FA   A                BIR,2      *+1          ERROR - CC3 RESET/CC4 SET
1316  00        003FA     6C000010   A                RD,0       X'10'
1317  00        003FB     691003FD   A                BCS,1      *+2
1318  00        003FC     2E000000   A                WAIT                    ERROR HALT
1319  00        003FD     6C000010   A                RD,0       X'10'
1320  00        003FE     694003F1   A                BCS,4      BLK50        LOOP/PROCEED
1321                                                PAGE
1322                                                *
1323                                                * BLOCK 51
1324                                                *
1325                                                * CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 17 = 1
1326                                                *
1327  00        003FF     6C000010   A       BLK51    RD,0       X'10'
1328  00        00400     68200402   A                BCR,2      *+2
1329  00        00401     2E000000   A                WAIT                    REPORT
1330  00        00402     321009C2   A                LW,1       *X'51'
1331  00        00403     32000975   A                LW,0       *0
1332  00        00404     4800098F   A                EOR,0      *X'4000'
1333  00        00405     69100407   A                BCS,1      *+2          CC4 SET
1334  00        00406     69200408   A                BCS,2      *+5          NO, CC3 SET
1335  00        00407     65200408   A                BIR,2      *+1          ERROR - CC3 RESET/CC4 SET
1336  00        00408     6C000010   A                RD,0       X'10'
1337  00        00409     6910040B   A                BCS,1      *+2
1338  00        0040A     2E000000   A                WAIT                    ERROR HALT
1339  00        00408     6C000010   A                RD,0       X'10'
1340  00        0040C     694003FF   A                BCS,4      BLK51        LOOP/PROCEED
1341                                                PAGE
1342                                                *
1343                                                * BLOCK 52
1344                                                *
1345                                                * CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 16 = 1
1346                                                *
1347  00        0040D     6C000010   A       BLK52    RD,0       X'10'
1348  00        0040E     68200410   A                BCR,2      *+2
1349  00        0040F     2E000000   A                WAIT                    REPORT
1350  00        00410     321009C3   A                LW,1       *X'52'
1351  00        00411     32000975   A                LW,0       *0
1352  00        00412     48000991   A                EOR,0      *X'8000'
1353  00        00413     69100415   A                BCS,1      *+2          CC4 SET
1354  00        00414     69200419   A                BCS,2      *+5          NO, CC3 SET
1355  00        00415     65200416   A                BIR,2      *+1          ERROR - CC3 RESET/CC4 SET
1356  00        00416     6C000010   A                RD,0       X'10'
1357  00        00417     69100419   A                BCS,1      *+2
1358  00        00418     2E000000   A                WAIT                    ERROR HALT
1359  00        00419     6C000010   A                RD,0       X'10'
1360  00        0041A     6940040D   A                BCS,4      BLK52        LOOP/PROCEED
1361                                                PAGE
1362                                                *
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1363					* BLOCK 53			
1364					*			
1365					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 15 = 1			
1366					*			
1367	00	0041B	6C000010	A	BLK53	RD,0	X'10'	
1368	00	0041C	6820041E	A		BCR,2	$+2	
1369	00	0041D	2E000000	A		WAIT		REPORT
1370	00	0041E	321009C4	A		LW,1	=X'53'	
1371	00	0041F	32000975	A		LW,0	=0	
1372	00	00420	48000993	A		EOR,0	=X'10000'	
1373	00	00421	69100423	A		BCS,1	$+2	CC4 SET
1374	00	00422	69200427	A		BCS,2	$+5	NO, CC3 SET
1375	00	00423	65200424	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1376	00	00424	6C000010	A		RD,0	X'10'	
1377	00	00425	69100427	A		BCS,1	$+2	
1378	00	00426	2E000000	A		WAIT		ERROR HALT
1379	00	00427	6C000010	A		RD,0	X'10'	
1380	00	00428	6940041B	A		BCS,4	BLK53	LOOP/PROCEED
1381						PAGE		
1382					*			
1383					* BLOCK 54			
1384					*			
1385					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 14 = 1			
1386					*			
1387	00	00429	6C000010	A	BLK54	RD,0	X'10'	
1388	00	0042A	6820042C	A		BCR,2	$+2	
1389	00	0042B	2E000000	A		WAIT		REPORT
1390	00	0042C	321009C5	A		LW,1	=X'54'	
1391	00	0042D	32000975	A		LW,0	=0	
1392	00	0042E	48000995	A		EOR,0	=X'20000'	
1393	00	0042F	69100431	A		BCS,1	$+2	CC4 SET
1394	00	00430	69200435	A		BCS,2	$+5	NO, CC3 SET
1395	00	00431	65200432	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1396	00	00432	6C000010	A		RD,0	X'10'	
1397	00	00433	69100435	A		BCS,1	$+2	
1398	00	00434	2E000000	A		WAIT		ERROR HALT
1399	00	00435	6C000010	A		RD,0	X'10'	
1400	00	00436	69400429	A		BCS,4	BLK54	LOOP/PROCEED
1401						PAGE		
1402					*			
1403					* BLOCK 55			
1404					*			
1405					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 13 = 1			
1406					*			
1407	00	00437	6C000010	A	BLK55	RD,0	X'10'	
1408	00	00438	6820043A	A		BCR,2	$+2	
1409	00	00439	2E000000	A		WAIT		REPORT
1410	00	0043A	321009C6	A		LW,1	=X'55'	
1411	00	0043B	32000975	A		LW,0	=0	
1412	00	0043C	48000996	A		EOR,0	=X'40000'	
1413	00	0043D	6910043F	A		BCS,1	$+2	CC4 SET
1414	00	0043E	69200443	A		BCS,2	$+5	NO, CC3 SET
1415	00	0043F	65200440	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1416	00	00440	6C000010	A		RD,0	X'10'	
1417	00	00441	69100443	A		BCS,1	$+2	
1418	00	00442	2E000000	A		WAIT		ERROR HALT
1419	00	00443	6C000010	A		RD,0	X'10'	
1420	00	00444	69400437	A		BCS,4	BLK55	LOOP/PROCEED
1421						PAGE		
1422					*			
1423					* BLOCK 56			
1424					*			
1425					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 12 = 1			
1426					*			
1427	00	00445	6C000010	A	BLK56	RD,0	X'10'	
1428	00	00446	68200448	A		BCR,2	$+2	
1429	00	00447	2E000000	A		WAIT		REPORT
1430	00	00448	321009C7	A		LW,1	=X'56'	
1431	00	00449	32000975	A		LW,0	=0	
1432	00	0044A	48000998	A		EOR,0	=X'80000'	
1433	00	0044B	6910044D	A		BCS,1	$+2	CC4 SET
1434	00	0044C	69200451	A		BCS,2	$+5	NO, CC3 SET

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1435	00	0044D	6520044E	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1436	00	0044E	6C000010	A		RD,0	X'10'	
1437	00	0044F	69100451	A		BCS,1	$+2	
1438	00	00450	2E000000	A		WAIT		ERROR HALT
1439	00	00451	6C000010	A		RD,0	X'10'	
1440	00	00452	69400445	A		BCS,4	BLK56	LOOP/PROCEED
1441						PAGE		
1442					*			
1443					* BLOCK 57			
1444					*			
1445					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 11 = 1			
1446					*			
1447	00	00453	6C000010	A	BLK57	RD,0	X'10'	
1448	00	00454	68200456	A		BCR,2	$+2	
1449	00	00455	2E000000	A		WAIT		REPORT
1450	00	00456	321009C8	A		LW,1	=X'57'	
1451	00	00457	32000975	A		LW,0	=0	
1452	00	00458	4800099A	A		EOR,0	=X'1000000'	
1453	00	00459	69100458	A		BCS,1	$+2	CC4 SET
1454	00	0045A	6920045F	A		BCS,2	$+5	NO, CC3 SET
1455	00	0045B	6520045C	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1456	00	0045C	6C000010	A		RD,0	X'10'	
1457	00	0045D	6910045F	A		BCS,1	$+2	
1458	00	0045E	2E000000	A		WAIT		ERROR HALT
1459	00	0045F	6C000010	A		RD,0	X'10'	
1460	00	00460	69400453	A		BCS,4	BLK57	LOOP/PROCEED
1461						PAGE		
1462					*			
1463					* BLOCK 58			
1464					*			
1465					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 10 = 1			
1466					*			
1467	00	00461	6C000010	A	BLK58	RD,0	X'10'	
1468	00	00462	68200464	A		BCR,2	$+2	
1469	00	00463	2E000000	A		WAIT		REPORT
1470	00	00464	321009C9	A		LW,1	=X'58'	
1471	00	00465	32000975	A		LW,0	=0	
1472	00	00466	4800099C	A		EOR,0	=X'2000000'	
1473	00	00467	69100469	A		BCS,1	$+2	CC4 SET
1474	00	00468	6920046D	A		BCS,2	$+5	NO, CC3 SET
1475	00	00469	6520046A	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1476	00	0046A	6C000010	A		RD,0	X'10'	
1477	00	0046B	6910046D	A		BCS,1	$+2	
1478	00	0046C	2E000000	A		WAIT		ERROR HALT
1479	00	0046D	6C000010	A		RD,0	X'10'	
1480	00	0046E	69400461	A		BCS,4	BLK58	LOOP/PROCEED
1481						PAGE		
1482					*			
1483					* BLOCK 59			
1484					*			
1485					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 9 = 1			
1486					*			
1487	00	0046F	6C000010	A	BLK59	RD,0	X'10'	
1488	00	00470	68200472	A		BCR,2	$+2	
1489	00	00471	2E000000	A		WAIT		REPORT
1490	00	00472	321009CA	A		LW,1	=X'59'	
1491	00	00473	32000975	A		LW,0	=0	
1492	00	00474	4800099E	A		EOR,0	=X'1400000'	
1493	00	00475	69100477	A		BCS,1	$+2	CC4 SET
1494	00	00476	69200478	A		BCS,2	$+5	NO, CC3 SET
1495	00	00477	65200478	A		BIR,2	$+1	ERROR - CC3 RESET/CC4 SET
1496	00	00478	6C000010	A		RD,0	X'10'	
1497	00	00479	6910047B	A		BCS,1	$+2	
1498	00	0047A	2E000000	A		WAIT		ERROR HALT
1499	00	0047B	6C000010	A		RD,0	X'10'	
1500	00	0047C	6940046F	A		BCS,4	BLK59	LOOP/PROCEED
1501						PAGE		
1502					*			
1503					* BLOCK 60			
1504					*			
1505					* CHECK ABILITY OF LW=EOR SEQUENCE TO SET CC3 WITH BIT 8 = 1			
1506					*			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1507	00	0047D	6C000010	A	BLK60	RD,0	X'10'	
1508	00	0047E	68200480	A		BCR,2	$+2	
1509	00	0047F	2E000000	A		WAIT		REPORT
1510	00	00480	321009CB	A		LW,1	=X'60'	
1511	00	00481	32000975	A		LW,0	=0	
1512	00	00482	480009A0	A		EOR,0	=X'800000'	
1513	00	00483	69100485	A		BCS,1	$+2	CC4 SET
1514	00	00484	69200489	A		BCS,2	$+5	NO, CC_3 SET
1515	00	00485	65200486	A		BIR,2	$+1	ERROR - CC_3 RESET/CC_4 SET
1516	00	00486	6C000010	A		RD,0	X'10'	
1517	00	00487	69100489	A		BCS,1	$+2	
1518	00	00488	2E000000	A		WAIT		ERROR HALT
1519	00	00489	6C000010	A		RD,0	X'10'	
1520	00	0048A	6940047D	A		BCS,4	BLK60	LOOP/PROCEED
1521						PAGE		
1522					*			
1523					* BLOCK 61			
1524					*			
1525					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC_3 WITH BIT 7 = 1			
1526					*			
1527	00	0048B	6C000010	A	BLK61	RD,0	X'10'	
1528	00	0048C	6820048E	A		BCR,2	$+2	
1529	00	0048D	2E000000	A		WAIT		REPORT
1530	00	0048E	321009CC	A		LW,1	=X'61'	
1531	00	0048F	32000975	A		LW,0	=0	
1532	00	00490	480009A2	A		EOR,0	=X'1000000'	
1533	00	00491	69100493	A		BCS,1	$+2	CC4 SET
1534	00	00492	69200497	A		BCS,2	$+5	NO, CC_3 SET
1535	00	00493	65200494	A		BIR,2	$+1	ERROR - CC_3 RESET/CC_4 SET
1536	00	00494	6C000010	A		RD,0	X'10'	
1537	00	00495	69100497	A		BCS,1	$+2	
1538	00	00496	2E000000	A		WAIT		ERROR HALT
1539	00	00497	6C000010	A		RD,0	X'10'	
1540	00	00498	6940048B	A		BCS,4	BLK61	LOOP/PROCEED
1541						PAGE		
1542					*			
1543					* BLOCK 62			
1544					*			
1545					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC_3 WITH BIT 6 = 1			
1546					*			
1547	00	00499	6C000010	A	BLK62	RD,0	X'10'	
1548	00	0049A	6820049C	A		BCR,2	$+2	
1549	00	0049B	2E000000	A		WAIT		REPORT
1550	00	0049C	321009CD	A		LW,1	=X'62'	
1551	00	0049D	32000975	A		LW,0	=0	
1552	00	0049E	480009A4	A		EOR,0	=X'2000000'	
1553	00	0049F	691004A1	A		BCS,1	$+2	CC4 SET
1554	00	004A0	692004A5	A		BCS,2	$+5	NO, CC_3 SET
1555	00	004A1	652004A2	A		BIR,2	$+1	ERROR - CC_3 RESET/CC_4 SET
1556	00	004A2	6C000010	A		RD,0	X'10'	
1557	00	004A3	691004A5	A		BCS,1	$+2	
1558	00	004A4	2E000000	A		WAIT		ERROR HALT
1559	00	004A5	6C000010	A		RD,0	X'10'	
1560	00	004A6	69400499	A		BCS,4	BLK62	LOOP/PROCEED
1561						PAGE		
1562					*			
1563					* BLOCK 63			
1564					*			
1565					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 5 = 1			
1566					*			
1567	00	004A7	6C000010	A	BLK63	RD,0	X'10'	
1568	00	004A8	682004AA	A		BCR,2	$+2	
1569	00	004A9	2E000000	A		WAIT		REPORT
1570	00	004AA	321009CE	A		LW,1	=X'63'	
1571	00	004AB	32000975	A		LW,0	=0	
1572	00	004AC	480009A6	A		EOR,0	=X'4000000'	
1573	00	004AD	691004AF	A		BCS,1	$+2	CC4 SET
1574	00	004AE	692004B3	A		BCS,2	$+5	NO, CC_3 SET
1575	00	004AF	652004B0	A		BIR,2	$+1	ERROR - CC_3 RESET/CC_4 SET
1576	00	004B0	6C000010	A		RD,0	X'10'	
1577	00	004B1	691004B3	A		BCS,1	$+2	
1578	00	004B2	2E000000	A		WAIT		ERROR HALT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1579	00	004B3	6C000010	A		RD,0	X'10'	
1580	00	004B4	694004A7	A		BCS,4	BLK63	LOOP/PROCEED
1581						PAGE		
1582					*			
1583					* BLOCK 64			
1584					*			
1585					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 4 = 1			
1586					*			
1587	00	004B5	6C000010	A	BLK64	RD,0	X'10'	
1588	00	004B6	682004B8	A		BCR,2	*+2	
1589	00	004B7	2E000000	A		WAIT		REPORT
1590	00	004B8	321009CF	A		LW,1	=X'64'	
1591	00	004B9	32000975	A		LW,0	=0	
1592	00	004BA	480009A8	A		EOR,0	=X'80000000'	
1593	00	004BB	691004BD	A		BCS,1	*+2	CC4 SET
1594	00	004BC	692004C1	A		BCS,2	*+5	NO, CC3 SET
1595	00	004BD	652004BE	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
1596	00	004BE	6C000010	A		RD,0	X'10'	
1597	00	004BF	691004C1	A		BCS,1	*+2	
1598	00	004C0	2E000000	A		WAIT		ERROR HALT
1599	00	004C1	6C000010	A		RD,0	X'10'	
1600	00	004C2	694004B5	A		BCS,4	BLK64	LOOP/PROCEED
1601						PAGE		
1602					*			
1603					* BLOCK 65			
1604					*			
1605					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 3 = 1			
1606					*			
1607	00	004C3	6C000010	A	BLK65	RD,0	X'10'	
1608	00	004C4	682004C6	A		BCR,2	*+2	
1609	00	004C5	2E000000	A		WAIT		REPORT
1610	00	004C6	321009D0	A		LW,1	=X'65'	
1611	00	004C7	32000975	A		LW,0	=0	
1612	00	004C8	480009AA	A		EOR,0	=X'10000000'	
1613	00	004C9	691004CB	A		BCS,1	*+2	CC4 SET
1614	00	004CA	692004CF	A		BCS,2	*+5	NO, CC3 SET
1615	00	004CB	652004CC	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
1616	00	004CC	6C000010	A		RD,0	X'10'	
1617	00	004CD	691004CF	A		BCS,1	*+2	
1618	00	004CE	2E000000	A		WAIT		ERROR WAIT
1619	00	004CF	6C000010	A		RD,0	X'10'	
1620	00	004D0	694004C3	A		BCS,4	BLK65	LOOP/PROCEED
1621						PAGE		
1622					*			
1623					* BLOCK 66			
1624					*			
1625					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 2 = 1			
1626					*			
1627	00	004D1	6C000010	A	BLK66	RD,0	X'10'	
1628	00	004D2	682004D4	A		BCR,2	*+2	
1629	00	004D3	2E000000	A		WAIT		REPORT
1630	00	004D4	321009D1	A		LW,1	=X'66'	
1631	00	004D5	32000975	A		LW,0	=0	
1632	00	004D6	480009AC	A		EOR,0	=X'20000000'	
1633	00	004D7	691004D9	A		BCS,1	*+2	CC4 SET
1634	00	004D8	692004DD	A		BCS,2	*+5	NO, CC3 SET
1635	00	004D9	652004DA	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
1636	00	004DA	6C000010	A		RD,0	X'10'	
1637	00	004DB	691004DD	A		BCS,1	*+2	
1638	00	004DC	2E000000	A		WAIT		ERROR HALT
1639	00	004DD	6C000010	A		RD,0	X'10'	
1640	00	004DE	694004D1	A		BCS,4	BLK66	LOOP/PROCEED
1641						PAGE		
1642					*			
1643					* BLOCK 67			
1644					*			
1645					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 1 = 1			
1646					*			
1647	00	004DF	6C000010	A	BLK67	RD,0	X'10'	
1648	00	004E0	682004E2	A		BCR,2	*+2	
1649	00	004E1	2E000000	A		WAIT		REPORT
1650	00	004E2	321009D2	A		LW,1	=X'67'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1651	00	004E3	32000975	A		LW,Q	=0	
1652	00	004E4	480009AE	A		EOR,0	=X'40000000'	
1653	00	004E5	691004E7	A		BCS,1	*+2	CC4 SET
1654	00	004E6	692004EB	A		BCS,2	*+5	NO, CC3 SET
1655	00	004E7	652004E8	A		BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
1656	00	004E8	6C000010	A		RD,0	X'10'	
1657	00	004E9	691004EB	A		BCS,1	*+2	
1658	00	004EA	2E000000	A		WAIT		ERROR HALT
1659	00	004EB	6C000010	A		RD,0	X'10'	
1660	00	004EC	694004DF	A		BCS,4	BLK67	LOOP/PROCEED
1661						PAGE		
1662					*			
1663					* BLOCK 68			
1664					*			
1665					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC4 AND RESET CC3 WITH BIT0 =1			
1666					*			
1667	00	004ED	6C000010	A	BLK68	RD,0	X'10'	
1668	00	004EE	682004F0	A		BCR,2	*+2	
1669	00	004EF	2E000000	A		WAIT		REPORT
1670	00	004F0	32000975	A		LW,0	=0	RESET CC3, CC4
1671	00	004F1	321009D3	A		LW,1	=X'68'	
1672	00	004F2	480009B0	A		EOR,0	=X'80000000'	SET CC4 AND RESET CC3
1673	00	004F3	681004F5	A		BCR,1	*+2	CC4 SET
1674	00	004F4	682004F9	A		BCR,2	*+5	YES, CC3 SET
1675	00	004F5	652004F6	A		BIR,2	*+1	ERROR = CC4 RESET/CC3 SET
1676	00	004F6	6C000010	A		RD,0	X'10'	
1677	00	004F7	691004F9	A		BCS,1	*+2	
1678	00	004F8	2E000000	A		WAIT		ERROR HALT
1679	00	004F9	6C000010	A		RD,0	X'10'	
1680	00	004FA	694004ED	A		BCS,4	BLK68	LOOP/PROCEED
1681						PAGE		
1682					*			
1683					* BLOCK 69			
1684					*			
1685					* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 WITH EVEN BITS = 1			
1686					*			
1687	00	004FB	6C000010	A	BLK69	RD,0	X'10'	
1688	00	004FC	682004FE	A		BCR,2	*+2	
1689	00	004FD	2E000000	A		WAIT		REPORT
1690	00	004FE	321009D4	A		LW,1	=X'69'	
1691	00	004FF	320009B4	A		LW,0	=-1	SET CC4, RESET CC3
1692	00	00500	48000975	A		EOR,0	=0	NO CHANGE
1693	00	00501	480009B4	A		EOR,0	=-1	RESET CC4
1694	00	00502	69100504	A		BCS,1	*+2	CC4 SET
1695	00	00503	68200508	A		BCR,2	*+5	NO, CC3 SET
1696	00	00504	65200505	A		BIR,2	*+1	YES, ERROR = CC3/CC4 SET
1697	00	00505	6C000010	A		RD,0	X'10'	
1698	00	00506	69100508	A		BCS,1	*+2	
1699	00	00507	2E000000	A		WAIT		ERROR HALT
1700	00	00508	6C000010	A		RD,0	X'10'	
1701	00	00509	694004FB	A		BCS,4	BLK69	LOOP/PROCEED
1702						PAGE		
1703					*			
1704					* BLOCK 70			
1705					*			
1706					* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 WITH BIT CONFIGURATION			
1707					* OF 10 OR 01 AND 11 OR 00			
1708					*			
1709	00	0050A	6C000010	A	BLK70	RD,0	X'10'	
1710	00	0050B	6820050D	A		BCR,2	*+2	
1711	00	0050C	2E000000	A		WAIT		REPORT
1712	00	0050D	321009D5	A		LW,1	=X'70'	
1713	00	0050E	32000975	A		LW,0	=0	RESET CC3,CC4
1714	00	0050F	320009D6	A		LW,0	=X'A5A5A5A5'	SET CC4
1715	00	00510	480009D7	A		EOR,0	=X'5A5AA5A5'	=FFFF0000 = CC CHANGE
1716	00	00511	480009D8	A		EOR,0	=X'FFFF0000'	=0 = RESET CC4
1717	00	00512	69100514	A		BCS,1	*+2	CC4 SET
1718	00	00513	68200518	A		BCR,2	*+5	NO, CC3 SET
1719	00	00514	65200515	A		BIR,2	*+1	YES, ERROR = CC3/CC4 SET
1720	00	00515	6C000010	A		RD,0	X'10'	
1721	00	00516	69100518	A		BCS,1	*+2	
1722	00	00517	2E000000	A		WAIT		ERROR HALT

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND          COMMENTS
1723      00            00518           6C000010         A                 RD,0     X'10'
1724      00            00519           6940050A         A                 BCS,4    BLK70            LOOP/PROCEED
1725                                                                       PAGE
1726                                                       *  BLOCK 71
1727                                                       *
1728                                                       *  CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC3 WITH BIT CONFIGURATION
1729                                                       *     OF 11 OR 00 AND 10 OR 01
1730                                                       *
1731                                                       *
1732      00            0051A           6C000010         A  BLK71    RD,0     X'10'
1733      00            0051B           6820051D         A                 BCR,2    $+2
1734      00            0051C           2E000000         A                 WAIT                      REPORT
1735      00            0051D           321009D9         A                 LW,1     =X'71'
1736      00            0051E           32000975         A                 LW,0     =0               RESET CC3, CC4
1737      00            0051F           320009D6         A                 LW,0     =X'A5A5A5A5'     SET CC4
1738      00            00520           480009DA         A                 EOR,0    =X'A5A55A5A'     =0000FFFF - SET CC3/RESET CC4
1739      00            00521           480009DB         A                 EOR,0    =X'0000FFFF'     =0 - RESET CC3
1740      00            00522           69100524         A                 BCS,1    $+2              CC4 SET
1741      00            00523           68200528         A                 BCR,2    $+5              NO, CC3 SET
1742      00            00524           65200525         A                 BIR,2    $+1              ERROR - CC3/CC4 SET
1743      00            00525           6C000010         A                 RD,0     X'10'
1744      00            00526           69100528         A                 BCS,1    $+2
1745      00            00527           2E000000         A                 WAIT                      ERROR HALT
1746      00            00528           6C000010         A                 RD,0     X'10'
1747      00            00529           6940051A         A                 BCS,4    BLK71            LOOP/PROCEED
1748                                                                       PAGE
1749                                                       *
1750                                                       *  BLOCK 72
1751                                                       *
1752                                                       *  CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 WITH BIT CONFIGURATION
1753                                                       *     OF 01 OR 10 AND 00 OR 11
1754                                                       *
1755      00            0052A           6C000010         A  BLK72    RD,0     X'10'
1756      00            00528           6820052D         A                 BCR,2    $+2
1757      00            0052C           2E000000         A                 WAIT                      REPORT
1758      00            0052D           321009DC         A                 LW,1     =X'72'
1759      00            0052E           32000975         A                 LW,0     =0               RESET CC3, CC4
1760      00            0052F           320009DD         A                 LW,0     =X'5A5A5A5A'     SET CC3
1761      00            00530           480009DA         A                 EOR,0    =X'A5A55A5A'     =FFFF0000, SET CC4
1762      00            00531           480009D8         A                 EOR,0    =X'FFFF0000'     =0, RESET CC4
1763      00            00532           69100534         A                 BCS,1    $+2              CC4 SET
1764      00            00533           68200538         A                 BCR,2    $+5              NO, CC3 SET
1765      00            00534           65200535         A                 BIR,2    $+1              YES, ERROR - CC3/CC4 SET
1766      00            00535           6C000010         A                 RD,0     X'10'
1767      00            00536           69100538         A                 BCS,1    $+2
1768      00            00537           2E000000         A                 WAIT                      ERROR HALT
1769      00            00538           6C000010         A                 RD,0     X'10'
1770      00            00539           6940052A         A                 BCS,4    BLK72            LOOP/PROCEED
1771                                                                       PAGE
1772                                                       *
1773                                                       *  BLOCK 73
1774                                                       *
1775                                                       *  CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC3 WITH BIT CONFIGURATION
1776                                                       *     OF 00 OR 11 AND 01 OR 10
1777                                                       *
1778      00            0053A           6C000010         A  BLK73    RD,0     X'10'
1779      00            0053B           6820053D         A                 BCR,2    $+2
1780      00            0053C           2E000000         A                 WAIT                      REPORT
1781      00            0053D           321009DE         A                 LW,1     =X'73'
1782      00            0053E           32000975         A                 LW,0     =0               RESET CC3, CC4
1783      00            0053F           320009DD         A                 LW,0     =X'5A5A5A5A'     SET CC3
1784      00            00540           480009D7         A                 EOR,0    =X'5A5AA5A5'     =0000FFFF, NO CC CHANGE
1785      00            00541           480009DB         A                 EOR,0    =X'0000FFFF'     =0, RESET CC3
1786      00            00542           69100544         A                 BCS,1    $+2              CC4 SET
1787      00            00543           68200548         A                 BCR,2    $+5              NO, CC3 SET
1788      00            00544           65200545         A                 BIR,2    $+1              YES, ERROR - CC3/CC4 SET
1789      00            00545           6C000010         A                 RD,0     X'10'
1790      00            00546           69100548         A                 BCS,1    $+2
1791      00            00547           2E000000         A                 WAIT                      ERROR HALT
1792      00            00548           6C000010         A                 RD,0     X'10'
1793      00            00549           6940053A         A                 BCS,4    BLK73            LOOP/PROCEED
1794                                                                       PAGE
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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL   OPERATION  OPERAND     COMMENTS
1795                                                                      *
1796                                                                      * BLOCK 74
1797                                                                      *
1798                                                                      * CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT
1799                                                                      *    CONFIGURATION OF 0'S AND 0'S
1800                                                                      *
1801      00        00054A          6C000010    A       BLK74   RD,0        X'10'
1802      00        00054B          6820054D    A               BCR,2       $+2
1803      00        00054C          2E000000    A               WAIT                    REPORT
1804      00        00054D          321009DF    A               LW,1        =X'74'
1805      00        00054E          32000975    A               LW,0        =0          REST CC3, CC4
1806      00        00054F          48000975    A               AND,0       =0          SHOULD = 0
1807      00        00550           48000975    A               EOR,0       =0
1808      00        00551           69100553    A               BCS,1       $+2         CC4 SET
1809      00        00552           68200557    A               BCR,2       $+5         NO, CC3 SET
1810      00        00553           65200554    A               BIR,2       $+1         YES, ERROR - CC3/CC4 SET
1811      00        00554           6C000010    A               RD,0        X'10'
1812      00        00555           69100557    A               BCS,1       $+2
1813      00        00556           2E000000    A               WAIT                    ERROR HALT
1814      00        00557           6C000010    A               RD,0        X'10'
1815      00        00558           6940054A    A               BCS,4       BLK74       LOOP/PROCEED
1816                                                              PAGE
1817                                                                      *
1818                                                                      * BLOCK 75
1819                                                                      *
1820                                                                      * CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT
1821                                                                      *    CONFIGURATION OF 0'S AND 1'S
1822                                                                      *
1823      00        00559           6C000010    A       BLK75   RD,0        X'10'
1824      00        0055A           6820055C    A               BCR,2       $+2
1825      00        0055B           2E000000    A               WAIT                    REPORT
1826      00        0055C           321009E0    A               LW,1        =X'75'
1827      00        0055D           32000975    A               LW,0        =0          RESET CC3, CC4
1828      00        0055E           4B0009B4    A               AND,0       =-1         SHOULD = 0
1829      00        0055F           48000975    A               EOR,0       =0
1830      00        00560           69100562    A               BCS,1       $+2         CC4 SET
1831      00        00561           68200566    A               BCR,2       $+5         NO, CC3 SET
1832      00        00562           65200563    A               BIR,2       $+1         YES, ERROR - CC3/CC4 SET
1833      00        00563           6C000010    A               RD,0        X'10'
1834      00        00564           69100566    A               BCS,1       $+2
1835      00        00565           2E000000    A               WAIT                    ERROR HALT
1836      00        00566           6C000010    A               RD,0        X'10'
1837      00        00567           69400559    A               BCS,4       BLK75       LOOP/PROCEED
1838                                                              PAGE
1839                                                                      *
1840                                                                      * BLOCK 76
1841                                                                      *
1842                                                                      * CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT
1843                                                                      *    CONFIGURATION OF 1'S AND 0'S
1844                                                                      *
1845      00        00568           6C000010    A       BLK76   RD,0        X'10'
1846      00        00569           6820056B    A               BCR,2       $+2
1847      00        0056A           2E000000    A               WAIT                    REPORT
1848      00        0056B           321009E1    A               LW,1        =X'76'
1849      00        0056C           32000984    A               LW,0        =-1         SET CC4, RESET CC3
1850      00        0056D           48000975    A               AND,0       =0          SHOULD = 0 AND RESET CC4
1851      00        0056E           48000975    A               EOR,0       =0
1852      00        0056F           69100571    A               BCS,1       $+2         CC4 SET
1853      00        00570           68200575    A               BCR,2       $+5         NO, CC3 SET
1854      00        00571           65200572    A               BIR,2       $+1         YES, ERROR - CC3/CC4 SET
1855      00        00572           6C000010    A               RD,0        X'10'
1856      00        00573           69100575    A               BCS,1       $+2
1857      00        00574           2E000000    A               WAIT                    ERROR HALT
1858      00        00575           6C000010    A               RD,0        X'10'
1859      00        00576           69400568    A               BCS,4       BLK76       LOOP/PROCEED
1860                                                              PAGE
1861                                                                      *
1862                                                                      * BLOCK 77
1863                                                                      *
1864                                                                      * CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT
1865                                                                      *    CONFIGURATION OF 1'S AND 1'S
1866                                                                      *
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1867	00	00577	6C000010	A	BLK77	RD,0	X'10'	
1868	00	00578	6820057A	A		BCR,2	*+2	
1869	00	00579	2E000000	A		WAIT		REPORT
1870	00	0057A	321009E2	A		LW,1	=X'77'	
1871	00	0057B	32000984	A		LW,0	=-1	
1872	00	0057C	48000984	A		AND,0	=-1	SHOULD = -1
1873	00	0057D	48000984	A		EOR,0	=-1	SHOULD = 0 AND RESET CC3, CC4
1874	00	0057E	69100580	A		BCS,1	*+2	CC4 SET
1875	00	0057F	68200584	A		BCR,2	*+5	NO, CC3 SET
1876	00	00580	65200581	A		BIR,2	*+1	YES, ERROR - CC3/CC4 SET
1877	00	00581	6C000010	A		RD,0	X'10'	
1878	00	00582	69100584	A		BCS,1	*+2	
1879	00	00583	2E000000	A		WAIT		ERROR HALT
1880	00	00584	6C000010	A		RD,0	X'10'	
1881	00	00585	69400577	A		BCS,4	BLK77	LOOP/PROCEED
1882						PAGE		
1883					*			
1884					* BLOCK 78			
1885					*			
1886					* CHECK ABILITY OF AND TO NOT SET CC3 OR CC4 WHEN RESULT = 0			
1887					*			
1888	00	00586	6C000010	A	BLK78	RD,0	X'10'	
1889	00	00587	68200589	A		BCR,2	*+2	
1890	00	00588	2E000000	A		WAIT		REPORT
1891	00	00589	321009E3	A		LW,1	=X'78'	
1892	00	0058A	32000975	A		LW,0	=0	RESET CC3, CC4
1893	00	0058B	48000984	A		AND,0	=-1	SHOULD = 0
1894	00	0058C	6910058E	A		BCS,1	*+2	CC4 SET
1895	00	0058D	68200592	A		BCR,2	*+5	NO, CC3 SET
1896	00	0058E	6520058F	A		BIR,2	*+1	YES, ERROR - CC3/CC4 SET
1897	00	0058F	6C000010	A		RD,0	X'10'	
1898	00	00590	69100592	A		BCS,1	*+2	
1899	00	00591	2E000000	A		WAIT		ERROR HALT
1900	00	00592	6C000010	A		RD,0	X'10'	
1901	00	00593	69400586	A		BCS,4	BLK78	LOOP/PROCEED
1902						PAGE		
1903					*			
1904					* BLOCK 79			
1905					*			
1906					* CHECK ABILITY OF AND TO SET CC3 WHEN RESULT IS POSITIVE			
1907					*			
1908	00	00594	6C000010	A	BLK79	RD,0	X'10'	
1909	00	00595	68200597	A		BCR,2	*+2	
1910	00	00596	2E000000	A		WAIT		REPORT
1911	00	00597	321009E4	A		LW,1	=X'79'	
1912	00	00598	32000976	A		LW,0	=1	SET CC3
1913	00	00599	48000984	A		AND,0	=-1	SHOULD = 00000001, NO CC CHANGE
1914	00	0059A	6910059C	A		BCS,1	*+2	CC4 SET
1915	00	0059B	692005A0	A		BCS,2	*+5	NO, CC3 SET
1916	00	0059C	6520059D	A		BIR,2	*+1	ERROR - CC3 RESET/CC4 SET
1917	00	0059D	6C000010	A		RD,0	X'10'	
1918	00	0059E	691005A0	A		BCS,1	*+2	
1919	00	0059F	2E000000	A		WAIT		ERROR HALT
1920	00	005A0	6C000010	A		RD,0	X'10'	
1921	00	005A1	69400594	A		BCS,4	BLK79	LOOP/PROCEED
1922						PAGE		
1923					*			
1924					* BLOCK 80			
1925					*			
1926					* CHECK ABILITY OF AND TO SET CC4 WHEN RESULT IS NEGATIVE			
1927					*			
1928	00	005A2	6C000010	A	BLK80	RD,0	X'10'	
1929	00	005A3	682005A5	A		BCR,2	*+2	
1930	00	005A4	2E000000	A		WAIT		REPORT
1931	00	005A5	32100982	A		LW,1	=X'80'	
1932	00	005A6	320009B0	A		LW,0	=X'80000000'	
1933	00	005A7	48000984	A		AND,0	=-1	SHOULD = 80000000, SET CC4
1934	00	005A8	681005AA	A		BCR,1	*+2	CC4 SET
1935	00	005A9	682005AE	A		BCR,2	*+5	YES, CC3 SET
1936	00	005AA	652005AB	A		BIR,2	*+1	ERROR - CC3 SET/CC4 RESET
1937	00	005AB	6C000010	A		RD,0	X'10'	
1938	00	005AC	691005AE	A		BCS,1	*+2	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND     COMMENTS
1939      00            005AD           2E000000         A                 WAIT                           ERROR HALT
1940      00            005AE           6C000010         A                 RD,0       X'10'
1941      00            005AF           694005A2         A                 BCS,4      BLK80               LOOP/PROCEED
1942                                                                       PAGE
1943                                                       *
1944                                                       * BLOCK 81
1945                                                       *
1946                                                       * CHECK ABILITY OF STW TO STORE ZEROS
1947                                                       *
1948      00            005B0           6C000010         A   BLK81         RD,0       X'10'
1949      00            005B1           682005B3         A                 BCR,2      $+2
1950      00            005B2           2E000000         A                 WAIT                           REPORT
1951      00            005B3           321009E5         A                 LW,1       =X'81'
1952      00            005B4           32000975         A                 LW,0       =0
1953      00            005B5           35000974         A                 STW,0      T1
1954      00            005B6           32000974         A                 LW,0       T1                  SHOULD RESET CC3, CC4
1955      00            005B7           691005B9         A                 BCS,1      $+2                 CC4 SET
1956      00            005B8           682005BD         A                 BCR,2      $+5                 NO, CC3 SET
1957      00            005B9           652005BA         A                 BIR,2      $+1                 YES, ERROR - CC3/CC4 SET
1958      00            005BA           6C000010         A                 RD,0       X'10'
1959      00            005BB           691005BD         A                 BCS,1      $+2
1960      00            005BC           2E000000         A                 WAIT                           ERROR HALT
1961      00            005BD           6C000010         A                 RD,0       X'10'
1962      00            005BE           694005B0         A                 BCS,4      BLK81               LOOP/PROCEED
1963                                                                       PAGE
1964                                                       *
1965                                                       * BLOCK 82
1966                                                       *
1967                                                       * CHECK ABILITY OF STW TO STORE ONES ON ZEROS
1968                                                       *
1969      00            005BF           6C000010         A   BLK82         RD,0       X'10'
1970      00            005C0           682005C2         A                 BCR,2      $+2
1971      00            005C1           2E000000         A                 WAIT                           REPORT
1972      00            005C2           321009E5         A                 LW,1       =X'81'
1973      00            005C3           32000975         A                 LW,0       =0
1974      00            005C4           35000974         A                 STW,0      T1                  CLEAR T1
1975      00            005C5           320009B4         A                 LW,0       =-1
1976      00            005C6           35000974         A                 STW,0      T1                  FILL T1 WITH ONES
1977      00            005C7           32000975         A                 LW,0       =0
1978      00            005C8           32000974         A                 LW,0       T1
1979      00            005C9           480009B4         A                 EOR,0      =-1                 SHOULD = 0, RESET CC3, CC4
1980      00            005CA           691005CC         A                 BCS,1      $+2                 CC4 SET
1981      00            005CB           682005D0         A                 BCR,2      $+5                 NO, CC3 SET
1982      00            005CC           652005CD         A                 BIR,2      $+1                 YES, ERROR - CC3/CC4 SET
1983      00            005CD           6C000010         A                 RD,0       X'10'
1984      00            005CE           691005D0         A                 BCS,1      $+2
1985      00            005CF           2E000000         A                 WAIT                           ERROR HALT
1986      00            005D0           6C000010         A                 RD,0       X'10'
1987      00            005D1           694005BF         A                 BCS,4      BLK82               LOOP/PROCEED
1988                                                                       PAGE
1989                                                       *
1990                                                       * BLOCK 83
1991                                                       *
1992                                                       * CHECK ABILITY OF STW TO STORE ONES ON ONES
1993                                                       *
1994      00            005D2           6C000010         A   BLK83         RD,0       X'10'
1995      00            005D3           682005D5         A                 BCR,2      $+2
1996      00            005D4           2E000000         A                 WAIT                           REPORT
1997      00            005D5           321009E6         A                 LW,1       =X'83'
1998      00            005D6           32000975         A                 LW,0       =0
1999      00            005D7           320009B4         A                 LW,0       =-1
2000      00            005D8           35000974         A                 STW,0      T1
2001      00            005D9           320009B4         A                 LW,0       =-1
2002      00            005DA           35000974         A                 STW,0      T1
2003      00            005DB           32000975         A                 LW,0       =0
2004      00            005DC           32000974         A                 LW,0       T1
2005      00            005DD           480009B4         A                 EOR,0      =-1                 SHOULD = 0, RESET CC3, CC4
2006      00            005DE           691005E0         A                 BCS,1      $+2                 CC4 SET
2007      00            005DF           682005E4         A                 BCR,2      $+5                 NO, CC3 SET
2008      00            005E0           652005E1         A                 BIR,2      $+1                 YES, ERROR - CC3/CC4 SET
2009      00            005E1           6C000010         A                 RD,0       X'10'
2010      00            005E2           691005E4         A                 BCS,1      $+2
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2011	00	005E3	2E000000	A		WAIT		ERROR HALT
2012	00	005E4	6C000010	A		RD,0	X'10'	
2013	00	005E5	694005D2	A		BCS,4	BLK83	LOOP/PROCEED
2014						PAGE		
2015					*			
2016					* BLOCK 84			
2017					*			
2018					* CHECK ABILITY OF STW TO STORE ZEROS ON ONES			
2019					*			
2020	00	005E6	6C000010	A	BLK84	RD,0	X'10'	
2021	00	005E7	682005E9	A		BCR,2	$+2	
2022	00	005E8	2E000000	A		WAIT		REPORT
2023	00	005E9	321009E7	A		LW,1	=X'84'	
2024	00	005EA	32000975	A		LW,0	=0	
2025	00	005EB	320009B4	A		LW,0	=-1	
2026	00	005EC	35000974	A		STW,0	T1	
2027	00	005ED	32000975	A		LW,0	=0	
2028	00	005EE	35000974	A		STW,0	T1	
2029	00	005EF	320009B4	A		LW,0	=-1	
2030	00	005F0	32000974	A		LW,0	T1	SHOULD = 0, CC3, CC4 RESET
2031	00	005F1	691005F3	A		BCS,1	$+2	CC4 SET
2032	00	005F2	682005F7	A		BCR,2	$+5	NO, CC3 SET
2033	00	005F3	652005F4	A		BIR,2	$+1	YES, ERROR - CC3/CC4 SET
2034	00	005F4	6C000010	A		RD,0	X'10'	
2035	00	005F5	691005F7	A		BCS,1	$+2	
2036	00	005F6	2E000000	A		WAIT		ERROR HALT
2037	00	005F7	6C000010	A		RD,0	X'10'	
2038	00	005F8	694005E6	A		BCS,4	BLK84	
2039						PAGE		
2040					*			
2041					* BLOCK 85			
2042					*			
2043					* CHECK ABILITY OF STW TO STORE ZEROS ON ZEROS			
2044					*			
2045	00	005F9	6C000010	A	BLK85	RD,0	X'10'	
2046	00	005FA	682005FC	A		BCR,2	$+2	
2047	00	005FB	2E000000	A		WAIT		REPORT
2048	00	005FC	321009E8	A		LW,1	=X'85'	
2049	00	005FD	32000975	A		LW,0	=0	
2050	00	005FE	35000974	A		STW,0	T1	
2051	00	005FF	32000975	A		LW,0	=0	
2052	00	00600	35000974	A		STW,0	T1	
2053	00	00601	320009B4	A		LW,0	=-1	FILL REG 0 WITH ONES, SET CC4
2054	00	00602	32000974	A		LW,0	T1	SHOULD = 0, RESET CC3, CC4
2055	00	00603	69100605	A		BCS,1	$+2	CC4 SET
2056	00	00604	68200609	A		BCR,2	$+5	NO, CC_3 SET
2057	00	00605	65200606	A		BIR,2	$+1	YES, ERROR - CC3/CC4 SET
2058	00	00606	6C000010	A		RD,0	X'10'	
2059	00	00607	69100609	A		BCS,1	$+2	
2060	00	00608	2E000000	A		WAIT		ERROR HALT
2061	00	00609	6C000010	A		RD,0	X'10'	
2062	00	0060A	694005F9	A		BCS,4	BLK85	LOOP/PROCEED
2063						PAGE		
2064					*			
2065					* BLOCK 86			
2066					*			
2067					* CHECK BCS,1 WITH CC4 SET, CC3 RESET			
2068					*			
2069	00	0060B	6C000010	A	BLK86	RD,0	X'10'	
2070	00	0060C	6820060E	A		BCR,2	$+2	
2071	00	0060D	2E000000	A		WAIT		REPORT
2072	00	0060E	321009E9	A		LW,1	=X'86'	
2073	00	0060F	320009B0	A		LW,0	=X'80000000'	SET CC4
2074	00	00610	69100615	A		BCS,1	$+5	SHOULD BRANCH
2075	00	00611	65200612	A		BIR,2	$+1	ERROR
2076	00	00612	6C000010	A		RD,0	X'10'	
2077	00	00613	69100615	A		BCS,1	$+2	
2078	00	00614	2E000000	A		WAIT		ERROR HALT
2079	00	00615	6C000010	A		RD,0	X'10'	
2080	00	00616	6940060B	A		BCS,4	BLK86	LOOP/PROCEED
2081						PAGE		
2082					*			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2083					* BLOCK 87			
2084					*			
2085					* CHECK BCR,1 WITH CC3, CC4 RESET			
2086					*			
2087	00	00617	6C000010	A	BLK87	RD,0	X'10'	
2088	00	00618	6820061A	A		BCR,2	$+2	
2089	00	00619	2E000000	A		WAIT		REPORT
2090	00	0061A	321009EA	A		LW,1	=X'87'	
2091	00	0061B	32000975	A		LW,0	=0	RESET CC3, CC4
2092	00	0061C	68100621	A		BCR,1	$+5	SHOULD BRANCH
2093	00	0061D	6520061E	A		BIR,2	$+1	ERROR
2094	00	0061E	6C000010	A		RD,0	X'10'	
2095	00	0061F	69100621	A		BCS,1	$+2	
2096	00	00620	2E000000	A		WAIT		ERROR HALT
2097	00	00621	6C000010	A		RD,0	X'10'	
2098	00	00622	69400617	A		BCS,4	BLK87	LOOP/PROCEED
2099						PAGE		
2100					*			
2101					** BLOCK 88			
2102					*			
2103					* CHECK BCS,2 WITH CC3, CC4 RESET			
2104					*			
2105	00	00623	6C000010	A	BLK88	RD,0	X'10'	
2106	00	00624	68200626	A		BCR,2	$+2	
2107	00	00625	2E000000	A		WAIT		REPORT
2108	00	00626	321009E8	A		LW,1	=X'88'	
2109	00	00627	32000975	A		LW,0	=0	RESET CC3, CC4
2110	00	00628	6920062A	A		BCS,2	$+2	SHOULD NOT BRANCH
2111	00	00629	6800062E	A		BCR,0	$+5	SHOULD BRANCH
2112	00	0062A	6520062B	A		BIR,2	$+1	ERROR
2113	00	0062B	6C000010	A		RD,0	X'10'	
2114	00	0062C	6910062E	A		BCS,1	$+2	
2115	00	0062D	2E000000	A		WAIT		ERROR HALT
2116	00	0062E	6C000010	A		RD,0	X'10'	
2117	00	0062F	69400623	A		BCS,4	BLK88	LOOP/PROCEED
2118						PAGE		
2119					*			
2120					* BLOCK 89			
2121					*			
2122					* CHECK BCR,2 WITH CC3 SET AND CC4 RESET			
2123					*			
2124	00	00630	6C000010	A	BLK89	RD,0	X'10'	
2125	00	00631	68200633	A		BCR,2	$+2	
2126	00	00632	2E000000	A		WAIT		REPORT
2127	00	00633	321009EC	A		LW,1	=X'89'	
2128	00	00634	32000975	A		LW,0	=0	
2129	00	00635	32000976	A		LW,0	=1	SET CC3, RESET CC4
2130	00	00636	68200638	A		BCR,2	$+2	SHOULD NOT BRANCH
2131	00	00637	6800063C	A		BCR,0	$+5	SHOULD BRANCH
2132	00	00638	65200639	A		BIR,2	$+1	ERROR
2133	00	00639	6C000010	A		RD,0	X'10'	
2134	00	0063A	6910063C	A		BCS,1	$+2	
2135	00	0063B	2E000000	A		WAIT		ERROR HALT
2136	00	0063C	6C000010	A		RD,0	X'10'	
2137	00	0063D	69400630	A		BCS,4	BLK89	LOOP/PROCEED
2138						PAGE		
2139					*			
2140					* BLOCK 90			
2141					*			
2142					* CHECK BCS,0 WITH CC3 RESET AND CC4 SET			
2143					*			
2144	00	0063E	6C000010	A	BLK90	RD,0	X'10'	
2145	00	0063F	68200641	A		BCR,2	$+2	
2146	00	00640	2E000000	A		WAIT		REPORT
2147	00	00641	321009ED	A		LW,1	=X'90'	
2148	00	00642	32000975	A		LW,0	=0	
2149	00	00643	320009B4	A		LW,0	=-1	SET CC4
2150	00	00644	69000646	A		BCS,0	$+2	SHOULD NOT BRANCH
2151	00	00645	6800064A	A		BCR,0	$+5	SHOULD BRANCH
2152	00	00646	65200647	A		BIR,2	$+1	ERROR
2153	00	00647	6C000010	A		RD,0	X'10'	
2154	00	00648	6910064A	A		BCS,1	$+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2155	00	00649	2E000000	A		WAIT		ERROR HALT
2156	00	0064A	6C000010	A		RD,0	X'10'	
2157	00	0064B	6940063E	A		BCS,4	BLK90	LOOP/PROCEED
2158						PAGE		
2159					*			
2160					* BLOCK 91			
2161					*			
2162					* CHECK BCS,0 WITH CC3 SET AND CC4 RESET			
2163					*			
2164	00	0064C	6C000010	A	BLK91	RD,0	X'10'	
2165	00	0064D	6820064F	A		BCR,2	*+2	
2166	00	0064E	2E000000	A		WAIT		REPORT
2167	00	0064F	321009EE	A		LW,1	=X'91'	
2168	00	00650	32000976	A		LW,0	=1	SETCC3
2169	00	00651	69000653	A		BCS,0	*+2	SHOULD NOT BRANCH
2170	00	00652	68000657	A		BCR,0	*+5	SHOULD BRANCH
2171	00	00653	65200654	A		BIR,2	*+1	ERROR
2172	00	00654	6C000010	A		RD,0	X'10'	
2173	00	00655	69100657	A		BCS,1	*+2	
2174	00	00656	2E000000	A		WAIT		ERROR HALT
2175	00	00657	6C000010	A		RD,0	X'10'	
2176	00	00658	6940064C	A		BCS,4	BLK91	LOOP/PROCEED
2177						PAGE		
2178					*			
2179					* BLOCK 92			
2180					*			
2181					* CHECK BIR FOR ADDER INPUTS OF A(0-31)=0, CS(0-30)=0, AND K(0-31)=0			
2182					*			
2183	00	00659	6C000010	A	BLK92	RD,0	X'10'	
2184	00	0065A	6820065C	A		BCR,2	*+2	
2185	00	0065B	2E000000	A		WAIT		REPORT
2186	00	0065C	321009EF	A		LW,1	=X'92'	
2187	00	0065D	32000975	A		LW,0	=0	A = 0
2188	00	0065E	65000663	A		BIR,0	*+5	REG 0 = 1, NO BRANCH
2189	00	0065F	48000976	A		EOR,0	=1	=0, RESER CC3, CC4
2190	00	00660	69100662	A		BCS,1	*+2	
2191	00	00661	68200666	A		BCR,2	*+5	
2192	00	00662	65200663	A		BIR,2	*+1	ERROR - CC3/CC4 SET
2193	00	00663	6C000010	A		RD,0	X'10'	
2194	00	00664	69100666	A		BCS,1	*+2	
2195	00	00665	2E000000	A		WAIT		ERROR HALT
2196	00	00666	6C000010	A		RD,0	X'10'	
2197	00	00667	69400659	A		BCS,4	BLK92	LOOP/PROCEED
2198						PAGE		
2199					*			
2200					* BLOCK 93			
2201					*			
2202					* CHECK BIR FOR ADDER INPUTS OF A(0-30)=1, CS(0-30)=0, AND K(0-31)=0			
2203					*			
2204	00	00668	6C000010	A	BLK93	RD,0	X'10'	
2205	00	00669	6820066B	A		BCR,2	*+2	
2206	00	0066A	2E000000	A		WAIT		REPORT
2207	00	0066B	321009F0	A		LW,1	=X'93'	
2208	00	0066C	320009F1	A		LW,0	=X'FFFFFFFE'	SET A(0-30)
2209	00	0066D	6500066F	A		BIR,0	*+2	=-1, SHOULD BRANCH
2210	00	0066E	68000673	A		BCR,0	*+5	ERROR - NO BRANCH
2211	00	0066F	480009B4	A		EOR,0	=-1	RESULT = 0, RESET CC3, CC4
2212	00	00670	69100672	A		BCS,1	*+2	
2213	00	00671	68200676	A		BCR,2	*+5	
2214	00	00672	65200673	A		BIR,2	*+1	ERROR - CC3/CC4 SET
2215	00	00673	6C000010	A		RD,0	X'10'	
2216	00	00674	69100676	A		BCS,1	*+2	
2217	00	00675	2E000000	A		WAIT		ERROR HALT
2218	00	00676	6C000010	A		RD,0	X'10'	
2219	00	00677	69400668	A		BCS,4	BLK93	LOOP/PROCEED
2220						PAGE		
2221					*			
2222					* BLOCK 94			
2223					*			
2224					* CHECK BIR FOR ADDER INPUTS OF A(0-31)=1, CS(0-30)=0, AND K(0-30)=1			
2225					*			

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND      COMMENTS
2226      00            00678           6C000010         A                BLK94    RD,0       X'10'
2227      00            00679           6820067B         A                         BCR,2      $+2
2228      00            0067A           2E000000         A                         WAIT                    REPORT
2229      00            0067B           321009F2         A                         LW,1       =X'94'
2230      00            0067C           320009B4         A                         LW,0       =-1          SET A(0-31)
2231      00            0067D           650006B2         A                         BIR,0      $+5          INCREMENT TO ZERO - NO BRANCH
2232      00            0067E           48000975         A                         EOR,0      =0           CC3,CC4 SHOULD RESET
2233      00            0067F           69100681         A                         BCS,1      $+2          CC4 SET
2234      00            00680           68200685         A                         BCR,2      $+5          NO, CC3 SET
2235      00            00681           65200682         A                         BIR,2      $+1          YES - ERROR
2236      00            00682           6C000010         A                         RD,0       X'10'
2237      00            00683           69100685         A                         BCS,1      $+2
2238      00            00684           2E000000         A                         WAIT                    ERROR HALT
2239      00            00685           6C000010         A                         RD,0       X'10'
2240      00            00686           69400678         A                         BCS,4      BLK94        LOOP/PROCEED
2241                                                                               PAGE
2242                                                      *
2243                                                      * BLOCK 95
2244                                                      *
2245                                                      * CHECK BIR FOR ADDER INPUTS A(0-30)=0, CS(0-30)=0, AND K30=1
2246                                                      *
2247                                                      *
2248      00            00687           6C000010         A                BLK95    RD,0       X'10'
2249      00            00688           6820068A         A                         BCR,2      $+2
2250      00            00689           2E000000         A                         WAIT                    REPORT
2251      00            0068A           321009F3         A                         LW,1       =X'95'
2252      00            0068B           32000976         A                         LW,0       =1           SCT A31
2253      00            0068C           65000691         A                         BIR,0      $+5          REG 0 = 2
2254      00            0068D           48000977         A                         EOR,0      =2           SUM=2
2255      00            0068E           69100690         A                         BCS,1      $+2          NO
2256      00            0068F           68200694         A                         BCR,2      $+5          YES
2257      00            00690           65200691         A                         BIR,2      $+1
2258      00            00691           6C000010         A                         RD,0       X'10'
2259      00            00692           69100694         A                         BCS,1      $+2
2260      00            00693           2E000000         A                         WAIT                    ERROR HALT
2261      00            00694           6C000010         A                         RD,0       X'10'
2262      00            00695           69400687         A                         BCS,4      BLK95        LOOP/PROCEED
2263                                                                               PAGE
2264                                                      *
2265                                                      * BLOCK 96
2266                                                      *
2267                                                      * CHECK BIR FOR ADDER INPUTS OF A29=0, CS29=0, AND K29=1
2268                                                      *
2269      00            00696           6C000010         A                BLK96    RD,0       X'10'
2270      00            00697           68200699         A                         BCR,2      $+2
2271      00            00698           2E000000         A                         WAIT                    REPORT
2272      00            00699           321009F4         A                         LW,1       =X'96'
2273      00            0069A           32000978         A                         LW,0       =3           A29=0
2274      00            0069B           650006A0         A                         BIR,0      $+5          REG 0 = 4
2275      00            0069C           48000979         A                         EOR,0      =4           SUM=4
2276      00            0069D           6910069F         A                         BCS,1      $+2          NO
2277      00            0069E           682006A3         A                         BCR,2      $+5          YES
2278      00            0069F           652006A0         A                         BIR,2      $+1
2279      00            006A0           6C000010         A                         RD,0       X'10'
2280      00            006A1           691006A3         A                         BCS,1      $+2
2281      00            006A2           2E000000         A                         WAIT                    ERROR HALT
2282      00            006A3           6C000010         A                         RD,0       X'10'
2283      00            006A4           69400696         A                         BCS,4      BLK96        LOOP/PROCEED
2284                                                                               PAGE
2285                                                      *
2286                                                      * BLOCK 97
2287                                                      *
2288                                                      * CHECK BIR FOR ADDER INPUTS OF A28=0, CS28=0, AND K28=1
2289                                                      *
2290      00            006A5           6C000010         A                BLK97    RD,0       X'10'
2291      00            006A6           682006A8         A                         BCR,2      $+2
2292      00            006A7           2E000000         A                         WAIT                    REPORT
2293      00            006A8           321009F5         A                         LW,1       =X'97'
2294      00            006A9           3200097E         A                         LW,0       =7           A28=0
2295      00            006AA           650006AF         A                         BIR,0      $+5          REG 0 = 8
2296      00            006AB           4800097B         A                         EOR,0      =8           SUM=8
2297      00            006AC           691006AE         A                         BCS,1      $+2          (3
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2298	00	006AD	682006B2	A		BCR,2	$+5	YES
2299	00	006AE	652006AF	A		BIR,2	$+1	
2300	00	006AF	6C000010	A		RD,0	X'10'	
2301	00	006B0	691006B2	A		BCS,1	$+2	
2302	00	006B1	2E000000	A		WAIT		ERROR HALT
2303	00	006B2	6C000010	A		RD,0	X'10'	
2304	00	006B3	694006A5	A		BCS,4	BLK97	LOOP/PROCEED
2305						PAGE		
2306					*			
2307					* BLOCK 98			
2308					*			
2309					* CHECK BIR FOR ADDER INPUTS OF A27=0, CS27=0, AND K27=1			
2310					*			
2311	00	006B4	6C000010	A	BLK98	RD,0	X'10'	
2312	00	006B5	682006B7	A		BCR,2	$+2	
2313	00	006B6	2E000000	A		WAIT		REPORT
2314	00	006B7	321009F6	A		LW,1	=X'98'	
2315	00	006B8	320009F7	A		LW,0	=X'F'	A27=0
2316	00	006B9	650006BE	A		BIR,0	$+5	REG 0 = 10
2317	00	006BA	4800097D	A		EOR,0	=X'10'	SUM=10
2318	00	006BB	691006BD	A		BCS,1	$+2	NO
2319	00	006BC	682006C1	A		BCR,2	$+5	YES
2320	00	006BD	652006BE	A		BIR,2	$+1	
2321	00	006BE	6C000010	A		RD,0	X'10'	
2322	00	006BF	691006C1	A		BCS,1	$+2	
2323	00	006C0	2E000000	A		WAIT		ERROR HALT
2324	00	006C1	6C000010	A		RD,0	X'10'	
2325	00	006C2	694006B4	A		BCS,4	BLK98	LOOP/PROCEED
2326						PAGE		
2327					*			
2328					* BLOCK 99			
2329					*			
2330					* CHECK BIR FOR ADDER INPUTS OF A26=0, CS26=0, K26=1			
2331					*			
2332	00	006C3	6C000010	A	BLK99	RD,0	X'10'	
2333	00	006C4	682006C6	A		BCR,2	$+2	
2334	00	006C5	2E000000	A		WAIT		REPORT
2335	00	006C6	321009F8	A		LW,1	=X'99'	
2336	00	006C7	320009F9	A		LW,0	=X'1F'	A26=0
2337	00	006C8	650006CD	A		BIR,0	$+5	REG 0 = 20
2338	00	006C9	4800097F	A		EOR,0	=X'20'	SUM=20
2339	00	006CA	691006CC	A		BCS,1	$+2	NO
2340	00	006CB	682006D0	A		BCR,2	$+5	YES
2341	00	006CC	652006CD	A		BIR,2	$+1	
2342	00	006CD	6C000010	A		RD,0	X'10'	
2343	00	006CE	691006D0	A		BCS,1	$+2	
2344	00	006CF	2E000000	A		WAIT		ERROR HALT
2345	00	006D0	6C000010	A		RD,0	X'10'	
2346	00	006D1	694006C3	A		BCS,4	BLK99	LOOP/PROCEED
2347						PAGE		
2348					*			
2349					* BLOCK 100			
2350					*			
2351					* CHECK BIR FOR ADDER INPUTS OF A25=0, CS25=0, AND K25=1			
2352					*			
2353	00	006D2	6C000010	A	BLK100	RD,0	X'10'	
2354	00	006D3	682006D5	A		BCR,2	$+2	
2355	00	006D4	2E000000	A		WAIT		REPORT
2356	00	006D5	32100983	A		LW,1	=X'100'	
2357	00	006D6	320009FA	A		LW,0	=X'3F'	A25=0
2358	00	006D7	650006DC	A		BIR,0	$+5	REG 0 = 40
2359	00	006D8	48000980	A		EOR,0	=X'40'	SUM=40
2360	00	006D9	691006DB	A		BCS,1	$+2	NO
2361	00	006DA	682006DF	A		BCR,2	$+5	YES
2362	00	006DB	652006DC	A		BIR,2	$+1	
2363	00	006DC	6C000010	A		RD,0	X'10'	
2364	00	006DD	691006DF	A		BCS,1	$+2	
2365	00	006DE	2E000000	A		WAIT		ERROR HALT
2366	00	006DF	6C000010	A		RD,0	X'10'	
2367	00	006E0	694006D2	A		BCS,4	BLK100	LOOP/PROCEED
2368						PAGE		
2369					*			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2370					* BLOCK 101			
2371					*			
2372					* CHECK BIR FOR ADDER INPUTS OF A24=0, CS24=0, AND K24=1			
2373					*			
2374	00	006E1	6C000010	A	BLK101	RD,0	X'10'	
2375	00	006E2	68200AE4	A		BCR,2	$+2	
2376	00	006E3	2E000000	A		WAIT		REPORT
2377	00	006E4	321009FB	A		LW,1	=X'101'	
2378	00	006E5	320009FC	A		LW,0	=X'7F'	A24=0
2379	00	006E6	650006EB	A		BIR,0	$+5	REG 0 = 80
2380	00	006E7	48000982	A		EOR,0	=X'80'	SUM=80
2381	00	006E8	691006EA	A		BCS,1	$+2	NO
2382	00	006E9	68200AEE	A		BCR,2	$+5	YES
2383	00	006EA	652006EB	A		BIR,2	$+1	
2384	00	006EB	6C000010	A		RD,0	X'10'	
2385	00	006EC	691006EE	A		BCS,1	$+2	
2386	00	006ED	2E000000	A		WAIT		ERROR HALT
2387	00	006EE	6C000010	A		RD,0	X'10'	
2388	00	006EF	694006E1	A		BCS,4	BLK101	LOOP/PROCEED
2389						PAGE		
2390					*			
2391					* BLOCK 102			
2392					*			
2393					* CHECK BIR FOR ADDER INPUTS OF A23=0, CS23=0, AND K23=1			
2394					*			
2395	00	006F0	6C000010	A	BLK102	RD,0	X'10'	
2396	00	006F1	68200AF3	A		BCR,2	$+2	
2397	00	006F2	2E000000	A		WAIT		REPORT
2398	00	006F3	321009FD	A		LW,1	=X'102'	
2399	00	006F4	320009FE	A		LW,0	=X'FF'	A23=0
2400	00	006F5	650006FA	A		BIR,0	$+5	REG 0 = 100
2401	00	006F6	48000983	A		EOR,0	=X'100'	SUM=100
2402	00	006F7	691006F9	A		BCS,1	$+2	NO
2403	00	006F8	68200AFD	A		BCR,2	$+5	YES
2404	00	006F9	652006FA	A		BIR,2	$+1	
2405	00	006FA	6C000010	A		RD,0	X'10'	
2406	00	006FB	691006FD	A		BCS,1	$+2	
2407	00	006FC	2E000000	A		WAIT		ERROR HALT
2408	00	006FD	6C000010	A		RD,0	X'10'	
2409	00	006FE	694006F0	A		BCS,4	BLK102	LOOP/PROCEED
2410						PAGE		
2411					*			
2412					* BLOCK 103			
2413					*			
2414					* CHECK BIR FOR ADDER INPUTS OF A22=0, CS22=0, K22=1			
2415					*			
2416	00	006FF	6C000010	A	BLK103	RD,0	X'10'	
2417	00	00700	68200702	A		BCR,2	$+2	
2418	00	00701	2E000000	A		WAIT		REPORT
2419	00	00702	321009FF	A		LW,1	=X'103'	
2420	00	00703	32000A00	A		LW,0	=X'1FF'	A22=0
2421	00	00704	65000709	A		BIR,0	$+5	REG 0 = 200
2422	00	00705	4800098b	A		EOR,0	=X'200'	SUM=200
2423	00	00706	69100708	A		BCS,1	$+2	NO
2424	00	00707	68200700	A		BCR,2	$+5	YES
2425	00	00708	65200709	A		BIR,2	$+1	
2426	00	00709	6C000010	A		RD,0	X'10'	
2427	00	0070A	6910070C	A		BCS,1	$+2	
2428	00	0070B	2E000000	A		WAIT		ERROR HALT
2429	00	0070C	6C000010	A		RD,0	X'10'	
2430	00	0070D	694006FF	A		BCS,4	BLK103	LOOP/PROCEED
2431						PAGE		
2432					*			
2433					* BLOCK 104			
2434					*			
2435					* CHECK BIR FOR ADDER INPUTS OF A21=0, CS21=0, K21=1			
2436					*			
2437	00	0070E	6C000010	A	BLK104	RD,0	X'10'	
2438	00	0070F	68200711	A		BCR,2	$+2	
2439	00	00710	2E000000	A		WAIT		REPORT
2440	00	00711	32100A01	A		LW,1	=X'104'	
2441	00	00712	32000A02	A		LW,0	=X'3FF'	A21=0

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2442	00	00713	65000718	A		BIR,0	$+5	REG 0 = 400
2443	00	00714	48000987	A		EOR,0	=X'400'	SUM=400
2444	00	00715	69100717	A		BCS,1	$+2	NO
2445	00	00716	6820071B	A		BCR,2	$+5	YES
2446	00	00717	65200718	A		BIR,2	$+1	
2447	00	00718	6C000010	A		RD,0	X'10'	
2448	00	00719	6910071B	A		BCS,1	$+2	
2449	00	0071A	2E000000	A		WAIT		ERROR HALT
2450	00	0071B	6C000010	A		RD,0	X'10'	
2451	00	0071C	6940070E	A		BCS,4	BLK104	LOOP/PROCEED
2452						PAGE		
2453					*			
2454					* BLOCK 105			
2455					*			
2456					* CHECK BIR FOR ADDER INPUTS OF A20=0, CS20=0, K20=1			
2457					*			
2458	00	0071D	6C000010	A	BLK105	RD,0	X'10'	
2459	00	0071E	68200720	A		BCR,2	$+2	
2460	00	0071F	2E000000	A		WAIT		REPORT
2461	00	00720	32100A03	A		LW,1	=X'105'	
2462	00	00721	32000A04	A		LW,0	=X'7FF'	A20=0
2463	00	00722	65000727	A		BIR,0	$+5	REG 0 = 800
2464	00	00723	48000989	A		EOR,0	=X'800'	SUM=800
2465	00	00724	69100726	A		BCS,1	$+2	NO
2466	00	00725	6820072A	A		BCR,2	$+5	YES
2467	00	00726	65200727	A		BIR,2	$+1	
2468	00	00727	6C000010	A		RD,0	X'10'	
2469	00	00728	6910072A	A		BCS,1	$+2	
2470	00	00729	2E000000	A		WAIT		ERROR HALT
2471	00	0072A	6C000010	A		RD,0	X'10'	
2472	00	0072B	6940071D	A		BCS,4	BLK105	LOOP/PROCEED
2473						PAGE		
2474					*			
2475					* BLOCK 106			
2476					*			
2477					* CHECK BIR FOR ADDER INPUTS OF A19=0, CS19=0, K19=1			
2478					*			
2479	00	0072C	6C000010	A	BLK106	RD,0	X'10'	
2480	00	0072D	6820072F	A		BCR,2	$+2	
2481	00	0072E	2E000000	A		WAIT		REPORT
2482	00	0072F	32100A05	A		LW,1	=X'106'	
2483	00	00730	32000A06	A		LW,0	=X'FFF'	A19=0
2484	00	00731	65000736	A		BIR,0	$+5	REG 0 = 1000
2485	00	00732	48000988	A		EOR,0	=X'1000'	SUM=1000
2486	00	00733	69100735	A		BCS,1	$+2	NO
2487	00	00734	68200739	A		BCR,2	$+5	YES
2488	00	00735	65200736	A		BIR,2	$+1	
2489	00	00736	6C000010	A		RD,0	X'10'	
2490	00	00737	69100739	A		BCS,1	$+2	
2491	00	00738	2E000000	A		WAIT		ERROR HALT
2492	00	00739	6C000010	A		RD,0	X'10'	
2493	00	0073A	6940072C	A		BCS,4	BLK106	LOOP/PROCEED
2494						PAGE		
2495					*			
2496					* BLOCK 107			
2497					*			
2498					* CHECK BIR FOR ADDER INPUTS OF A18=0, CS18=0, K18=1			
2499					*			
2500	00	0073B	6C000010	A	BLK107	RD,0	X'10'	
2501	00	0073C	6820073E	A		BCR,2	$+2	
2502	00	0073D	2E000000	A		WAIT		REPORT
2503	00	0073E	32100A07	A		LW,1	=X'107'	
2504	00	0073F	32000A08	A		LW,0	=X'1FFF'	A18=0
2505	00	00740	65000745	A		BIR,0	$+5	REG 0 = 2000
2506	00	00741	4800098D	A		EOR,0	=X'2000'	SUM=2000X
2507	00	00742	69100744	A		BCS,1	$+2	NO
2508	00	00743	68200748	A		BCR,2	$+5	YES
2509	00	00744	65200745	A		BIR,2	$+1	
2510	00	00745	6C000010	A		RD,0	X'10'	
2511	00	00746	69100748	A		BCS,1	$+2	
2512	00	00747	2E000000	A		WAIT		ERROR HALT
2513	00	00748	6C000010	A		RD,0	X'10'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2514	00	00749	69400736	A		BCS,4	BLK107	LOOP/PROCEED
2515						PAGE		
2516					*			
2517					* BLOCK 108			
2518					*			
2519					* CHECK BIR FOR ADDER INPUTS OF A17=0, CS17=0, K17=1			
2520					*			
2521	00	0074A	6C000010	A	BLK108	RD,0	X'10'	
2522	00	0074B	68200740	A		BCR,2	$+2	
2523	00	0074C	2E000000	A		WAIT		REPORT
2524	00	0074D	32100A09	A		LW,1	=X'108'	
2525	00	0074F	32000A0A	A		LW,0	=X'3FFF'	A17=0
2526	00	00751	65000754	A		BIR,0	$+5	REG 0 = 4000
2527	00	00753	48000FFF	A		EOR,0	=X'4000'	SUM=4000
2528	00	00754	69100758	A		BCS,1	$+2	NO
2529	00	00756	68200757	A		BCR,2	$+5	YES
2530	00	00758	65200754	A		BIR,2	$+1	
2531	00	00759	6C000010	A		RD,0	X'10'	
2532	00	0075B	69100757	A		BCS,1	$+2	
2533	00	0075C	2E000000	A		WAIT		ERROR HALT
2534	00	0075D	6C000010	A		RD,0	X'10'	
2535	00	0075F	6940074A	A		BCS,4	BLK108	LOOP/PROCEED
2536						PAGE		
2537					*			
2538					* BLOCK 109			
2539					*			
2540					* CHECK BIR FOR ADDER INPUTS OF A16=0, CS16=0, K16=1			
2541					*			
2542	00	00759	6C000010	A	BLK109	RD,0	X'10'	
2543	00	0075A	6820075C	A		BCR,2	$+2	
2544	00	0075B	2E000000	A		WAIT		REPORT
2545	00	0075C	32100A0B	A		LW,1	=X'109'	
2546	00	0075D	32000A0C	A		LW,0	=X'7FFF'	A16=0
2547	00	0075E	65000763	A		BIR,0	$+5	REG 0 = 8000
2548	00	0075F	48000991	A		EOR,0	=X'8000'	SUM = 8000
2549	00	00760	69100762	A		BCS,1	$+2	(3
2550	00	00761	68200766	A		BCR,2	$+5	YES
2551	00	00762	65200763	A		BIR,2	$+1	
2552	00	00763	6C000010	A		RD,0	X'10'	
2553	00	00764	69100766	A		BCS,1	$+2	
2554	00	00765	2E000000	A		WAIT		ERROR HALT
2555	00	00766	6C000010	A		RD,0	X'10'	
2556	00	00767	69400759	A		BCS,4	BLK109	LOOP/PROCEED
2557						PAGE		
2558					*			
2559					* BLOCK 110			
2560					*			
2561					* CHECK BIR FOR ADDER INPUTS OF A15=0, CS15=0, K15=1			
2562					*			
2563	00	00768	6C000010	A	BLK110	RD,0	X'10'	
2564	00	00769	6820076B	A		BCR,2	$+2	
2565	00	0076A	2E000000	A		WAIT		
2566	00	0076B	32100A0D	A		LW,1	=X'110'	
2567	00	0076C	320009DB	A		LW,0	=X'FFFF'	A15=0
2568	00	0076D	65000772	A		BIR,0	$+5	REG 0 = 10000
2569	00	0076E	48000993	A		EOR,0	=X'10000'	SUM=10000
2570	00	0076F	69100771	A		BCS,1	$+2	NO
2571	00	00770	68200775	A		BCR,2	$+5	YES
2572	00	00771	65200772	A		BIR,2	$+1	
2573	00	00772	6C000010	A		RD,0	X'10'	
2574	00	00773	69100775	A		BCS,1	$+2	
2575	00	00774	2E000000	A		WAIT		ERROR HALT
2576	00	00775	6C000010	A		RD,0	X'10'	
2577	00	00776	69400768	A		BCS,4	BLK110	LOOP/PROCEED
2578						PAGE		
2579					*			
2580					* BLOCK 111			
2581					*			
2582					* CHECK BIR FOR ADDER INPUTS OF A14=0, CS14=0, K14=1			
2583					*			
2584	00	00777	6C000010	A	BLK111	RD,0	X'10'	
2585	00	00778	6820077A	A		BCR,2	$+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2586	00	00779	2E000000	A		WAIT		REPORT
2587	00	0077A	32100A0E	A		LW,1	=X'1111'	
2588	00	0077B	32000A0F	A		LW,0	=X'1FFFF'	A14=0
2589	00	0077C	65000781	A		BIR,0	$+5	REG 0 = 20000
2590	00	0077D	48000995	A		EOR,0	=X'20000'	SUM=20000
2591	00	0077E	69100780	A		BCS,1	$+2	NO
2592	00	0077F	68200784	A		BCR,2	$+5	YES
2593	00	00780	65200781	A		BIR,2	$+1	
2594	00	00781	6C000010	A		RD,0	X'10'	
2595	00	00782	69100784	A		BCS,1	$+2	
2596	00	00783	2E000000	A		WAIT		ERROR HALT
2597	00	00784	6C000010	A		RD,0	X'10'	
2598	00	00785	69400777	A		BCS,4	BLK111	LOOP/PROCEED
2599						PAGE		
2600					*			
2601					* BLOCK 112			
2602					*			
2603					* CHECK BIR FOR ADDER INPUTS OF A_{13}=0, CS_{13}=0, K_{13}=1			
2604					*			
2605	00	00786	6C000010	A	BLK112	RD,0	X'10'	
2606	00	00787	68200789	A		BCR,2	$+2	
2607	00	00788	2E000000	A		WAIT		REPORT
2608	00	00789	32100A10	A		LW,1	=X'112'	
2609	00	0078A	32000A11	A		LW,0	=X'3FFFF'	A13=0
2610	00	0078B	65000790	A		BIR,0	$+5	REG 0 = 40000
2611	00	0078C	48000996	A		EOR,0	=X'40000'	SUM=40000
2612	00	0078D	6910078F	A		BCS,1	$+2	NO
2613	00	0078E	68200793	A		BCR,2	$+5	YES
2614	00	0078F	65200790	A		BIR,2	$+1	
2615	00	00790	6C000010	A		RD,0	X'10'	
2616	00	00791	69100793	A		BCS,1	$+2	
2617	00	00792	2E000000	A		WAIT		ERROR HALT
2618	00	00793	6C000010	A		RD,0	X'10'	
2619	00	00794	69400786	A		BCS,4	BLK112	LOOP/PROCEED
2620						PAGE		
2621					*			
2622					* BLOCK 113			
2623					*			
2624					* CHECK BIR FOR ADDER INPUTS OF A_{12}=0, CS_{12}=0, K_{12}=1			
2625					*			
2626	00	00795	6C000010	A	BLK113	RD,0	X'10'	
2627	00	00796	68200798	A		BCR,2	$+2	
2628	00	00797	2E000000	A		WAIT		REPORT
2629	00	00798	32100A12	A		LW,1	=X'113'	
2630	00	00799	32000A13	A		LW,0	=X'7FFFF'	A12=0
2631	00	0079A	6500079F	A		BIR,0	$+5	REG 0 = 80000
2632	00	0079B	48000998	A		EOR,0	=X'80000'	SUM=80000
2633	00	0079C	6910079E	A		BCS,1	$+2	NO
2634	00	0079D	682007A2	A		BCR,2	$+5	YES
2635	00	0079E	6520079F	A		BIR,2	$+1	
2636	00	0079F	6C000010	A		RD,0	X'10'	
2637	00	007A0	691007A2	A		BCS,1	$+2	
2638	00	007A1	2E000000	A		WAIT		ERROR HALT
2639	00	007A2	6C000010	A		RD,0	X'10'	
2640	00	007A3	69400795	A		BCS,4	BLK113	LOOP/PROCEED
2641						PAGE		
2642					*			
2643					* BLOCK 114			
2644					*			
2645					* CHECK BIR FOR ADDER INPUTS OF A_{11}=0, CS_{11}=0, K_{11}=1			
2646					*			
2647	00	007A4	6C000010	A	BLK114	RD,0	X'10'	
2648	00	007A5	682007A7	A		BCR,2	$+2	
2649	00	007A6	2E000000	A		WAIT		REPORT
2650	00	007A7	32100A14	A		LW,1	=X'114'	
2651	00	007A8	32000A15	A		LW,0	=X'FFFFF'	A11=0
2652	00	007A9	650007AE	A		BIR,0	$+5	REG 0 = 100000
2653	00	007AA	4800099A	A		EOR,0	=X'100000'	SUM=100000
2654	00	007AB	691007AD	A		BCS,1	$+2	NO
2655	00	007AC	682007B1	A		BCR,2	$+5	YES
2656	00	007AD	652007AE	A		BIR,2	$+1	
2657	00	007AE	6C000010	A		RD,0	X'10'	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND          COMMENTS
2658      00            007A5           691007B1         A                BCS,1     $+2
2659      00            007A9           2E000000         A                WAIT                               ERROR HALT
2660      00            007B1           6C000010         A                RD,0      X'10'
2661      00            007B2           694007A4         A                BCS,4     BLK114                   LOOP/PROCEED
2662                                                                       PAGE
2663                                                     *
2664                                                     * BLOCK 115
2665                                                     *
2666                                                     * CHECK BIR FOR ADDER INPUTS OF A10=0, CS10=0, K10=1
2667                                                     *
2668      00            007B3           6C000010         A  BLK115   RD,0      X'10'
2669      00            007B4           682007B6         A                BCR,2     $+2
2670      00            007B5           2E000000         A                WAIT                               REPORT
2671      00            007B6           32100A16         A                LW,1      =X'115'
2672      00            007B7           32000A17         A                LW,0      =X'1FFFFF'               A10=0
2673      00            007B8           650007BD         A                BIR,0     $+5                      REG 0 = 200000
2674      00            007B9           480009C0         A                EOR,0     =X'200000'               SUM=200000
2675      00            007BA           691007BC         A                BCS,1     $+2                      NO
2676      00            007BB           682007C0         A                BCR,2     $+5                      YES
2677      00            007BC           652007BD         A                BIR,2     $+1
2678      00            007BD           6C000010         A                RD,0      X'10'
2679      00            007BE           691007C0         A                BCS,1     $+2
2680      00            007BF           2E000000         A                WAIT                               ERROR HALT
2681      00            007C0           6C000010         A                RD,0      X'10'
2682      00            007C1           694007B3         A                BCS,4     BLK115                   LOOP/PROCEED
2683                                                                       PAGE
2684                                                     *
2685                                                     * BLOCK 116
2686                                                     *
2687                                                     * CHECK BIR FOR ADDER INPUTS OF A9=0, CS9=0, K9=1
2688                                                     *
2689      00            007C2           6C000010         A  BLK116   RD,0      X'10'
2690      00            007C3           682007C5         A                BCR,2     $+2
2691      00            007C4           2E000000         A                WAIT
2692      00            007C5           32100A18         A                LW,1      =X'116'
2693      00            007C6           32000A19         A                LW,0      =X'3FFFFF'               A9=0
2694      00            007C7           650007CC         A                BIR,0     $+5                      REG 0 = 400000
2695      00            007C8           480009E0         A                EOR,0     =X'400000'               SUM=400000
2696      00            007C9           691007CB         A                BCS,1     $+2                      NO
2697      00            007CA           682007CF         A                BCR,2     $+5                      YES
2698      00            007CB           652007CC         A                BIR,2     $+1
2699      00            007CC           6C000010         A                RD,0      X'10'
2700      00            007CD           691007CF         A                BCS,1     $+2
2701      00            007CE           2E000000         A                WAIT                               ERROR HALT
2702      00            007CF           6C000010         A                RD,0      X'10'
2703      00            007D0           694007C2         A                BCS,4     BLK116                   LOOP/PROCEED
2704                                                                       PAGE
2705                                                     *
2706                                                     * BLOCK 117
2707                                                     *
2708                                                     * CHECK BIR FOR ADDER INPUTS OF A8=0, CS8=0, K8=1
2709                                                     *
2710      00            007D1           6C000010         A  BLK117   RD,0      X'10'
2711      00            007D2           682007D4         A                BCR,2     $+2
2712      00            007D3           2E000000         A                WAIT                               REPORT
2713      00            007D4           32100A1A         A                LW,1      =X'117'
2714      00            007D5           32000A1B         A                LW,0      =X'7FFFFF'               A8=0
2715      00            007D6           650007DB         A                BIR,0     $+5                      REG 0 = 800000
2716      00            007D7           480009A0         A                EOR,0     =X'800000'               SUM=800000
2717      00            007D8           691007DA         A                BCS,1     $+2                      NO
2718      00            007D9           682007DE         A                BCR,2     $+5                      YES
2719      00            007DA           652007DB         A                BIR,2     $+1
2720      00            007DB           6C000010         A                RD,0      X'10'
2721      00            007DC           691007DE         A                BCS,1     $+2
2722      00            007DD           2E000000         A                WAIT                               ERROR HALT
2723      00            007DE           6C000010         A                RD,0      X'10'
2724      00            007DF           694007D1         A                BCS,4     BLK117                   LOOP/PROCEED
2725                                                                       PAGE
2726                                                     *
2727                                                     * BLOCK 118
2728                                                     *
2729                                                     * CHECK BIR FOR ADDER INPUTS OF A7=0, CS7=0, K7=1
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2730					*			
2731	00	007E0	6C000010	A	BLK118	RD,0	X'10'	
2732	00	007E1	682007E3	A		BCR,2	$+2	
2733	00	007E2	2E000000	A		WAIT		REPORT
2734	00	007E3	32100A1C	A		LW,1	=X'118'	
2735	00	007E4	32000A1D	A		LW,0	=X'FFFFFF'	A7=0
2736	00	007E5	650007EA	A		BIR,0	$+5	REG 0 = 1000000
2737	00	007E6	480009A2	A		EOR,0	=X'1000000'	SUM=1000000
2738	00	007E7	691007E9	A		BCS,1	$+2	NO
2739	00	007E8	682007ED	A		BCR,2	$+5	YES
2740	00	007E9	652007EA	A		BIR,2	$+1	
2741	00	007EA	6C000010	A		RD,0	X'10'	
2742	00	007EB	691007ED	A		BCS,1	$+2	
2743	00	007EC	2E000000	A		WAIT		ERROR HALT
2744	00	007ED	6C000010	A		RD,0	X'10'	
2745	00	007EE	694007E0	A		BCS,4	BLK118	LOOP/PROCEED
2746						PAGE		
2747					*			
2748					* BLOCK 119			
2749					*			
2750					* CHECK BIR FOR ADDER INPUTS OF A6=0, CS6=0, K6=1			
2751					*			
2752	00	007EF	6C000010	A	BLK119	RD,0	X'10'	
2753	00	007F0	682007F2	A		BCR,2	$+2	
2754	00	007F1	2E000000	A		WAIT		REPORT
2755	00	007F2	32100A1E	A		LW,1	=X'119'	
2756	00	007F3	32000A1F	A		LW,0	=X'1FFFFFF'	A6=0
2757	00	007F4	650007F9	A		BIR,0	$+5	REG 0 = 2000000
2758	00	007F5	480009A4	A		EOR,0	=X'2000000'	SUM=2000000
2759	00	007F6	691007F8	A		BCS,1	$+2	NO
2760	00	007F7	682007FC	A		BCR,2	$+5	YES
2761	00	007F8	652007F9	A		BIR,2	$+1	
2762	00	007F9	6C000010	A		RD,0	X'10'	
2763	00	007FA	691007FC	A		BCS,1	$+2	
2764	00	007FB	2E000000	A		WAIT		ERROR HALT
2765	00	007FC	6C000010	A		RD,0	X'10'	
2766	00	007FD	694007EF	A		BCS,4	BLK119	LOOP/PROCEED
2767						PAGE		
2768					*			
2769					* BLOCK 120			
2770					*			
2771					* CHECK BIR FOR ADDER INPUTS OF A5=0, CS5=0, K5=1			
2772					*			
2773	00	007FE	6C000010	A	BLK120	RD,0	X'10'	
2774	00	007FF	68200801	A		BCR,2	$+2	
2775	00	00800	2E000000	A		WAIT		REPORT
2776	00	00801	32100A20	A		LW,1	=X'120'	
2777	00	00802	32000A21	A		LW,0	=X'3FFFFFF'	A5=0
2778	00	00803	65000808	A		BIR,0	$+5	REG 0 = 4000000
2779	00	00804	480009A6	A		EOR,0	=X'4000000'	SUM=4000000
2780	00	00805	69100807	A		BCS,1	$+2	NO
2781	00	00806	68200808	A		BCR,2	$+5	YES
2782	00	00807	65200808	A		BIR,2	$+1	
2783	00	00808	6C000010	A		RD,0	X'10'	
2784	00	00809	69100808	A		BCS,1	$+2	
2785	00	0080A	2E000000	A		WAIT		ERROR HALT
2786	00	0080B	6C000010	A		RD,0	X'10'	
2787	00	0080C	694007FE	A		BCS,4	BLK120	LOOP/PROCEED
2788						PAGE		
2789					*			
2790					* BLOCK 121			
2791					*			
2792					* CHECK BIR FOR ADDER INPUTS OF A4=0, CS4=0, K4=1			
2793					*			
2794	00	0080D	6C000010	A	BLK121	RD,0	X'10'	
2795	00	0080E	68200810	A		BCR,2	$+2	
2796	00	0080F	2E000000	A		WAIT		REPORT
2797	00	00810	32100A22	A		LW,1	=X'121'	
2798	00	00811	32000A23	A		LW,0	=X'7FFFFFF'	A4=0
2799	00	00812	65000817	A		BIR,0	$+5	REG 0 = 8000000
2800	00	00813	480009A8	A		EOR,0	=X'8000000'	SUM=8000000
2801	00	00814	69100816	A		BCS,1	$+2	NO

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2812	00	00815	6820081A	A		BCR,2	$+5	YES
2813	00	00816	65200817	A		BIR,2	$+1	
2814	00	00817	6C000010	A		RD,0	X'10'	
2815	00	00818	69100A1A	A		BCS,1	$+2	
2816	00	00819	2E000000	A		WAIT		ERROR HALT
2817	00	0081A	6C000010	A		RD,0	X'10'	
2818	00	0081B	6940080D	A		BCS,4	BLK121	LOOP/PROCEED
2819						PAGE		
2820					*			
2821					* BLOCK 122			
2822					*			
2823					* CHECK BIR FOR ADDER INPUTS OF A3=0, CS3=0, K3=1			
2824					*			
2825	00	0081C	6C000010	A	BLK122	RD,0	X'10'	
2826	00	0081D	6820081F	A		BCR,2	$+2	
2827	00	0081E	2E000000	A		WAIT		REPORT
2828	00	0081F	32100A24	A		LW,1	=X'122'	
2829	00	00820	32000A25	A		LW,0	=X'FFFFFFFF'	A3=0
2830	00	00821	65000826	A		BIR,0	$+5	REG 0 = 10000000
2831	00	00822	480009AA	A		EOR,0	=X'10000000'	SUM=10000000
2832	00	00823	69100825	A		BCS,1	$+2	NO
2833	00	00824	68200829	A		BCR,2	$+5	YES
2834	00	00825	65200826	A		BIR,2	$+1	
2835	00	00826	6C000010	A		RD,0	X'10'	
2836	00	00827	69100829	A		BCS,1	$+2	
2837	00	00828	2E000000	A		WAIT		ERROR WAIT
2838	00	00829	6C000010	A		RD,0	X'10'	
2839	00	0082A	6940081C	A		BCS,4	BLK122	LOOP/PROCEED
2840						PAGE		
2841					*			
2842					* BLOCK 123			
2843					*			
2844					* CHECK BIR FOR ADDER INPUTS OF A2=0, CS2=0, K2=1			
2845					*			
2846	00	0082B	6C000010	A	BLK123	RD,0	X'10'	
2847	00	0082C	6820082E	A		BCR,2	$+2	
2848	00	0082D	2E000000	A		WAIT		REPORT
2849	00	0082E	32100A26	A		LW,1	=X'123'	
2850	00	0082F	32000A27	A		LW,0	=X'1FFFFFFF'	A2=0
2851	00	00830	65000835	A		BIR,0	$+5	REG 0 = 20000000
2852	00	00831	480009AC	A		EOR,0	=X'20000000'	SUM=20000000
2853	00	00832	69100834	A		BCS,1	$+2	NO
2854	00	00833	68200838	A		BCR,2	$+5	YES
2855	00	00834	65200835	A		BIR,2	$+1	
2856	00	00835	6C000010	A		RD,0	X'10'	
2857	00	00836	69100838	A		BCS,1	$+2	
2858	00	00837	2E000000	A		WAIT		ERROR HALT
2859	00	00838	6C000010	A		RD,0	X'10'	
2860	00	00839	6940082B	A		BCS,4	BLK123	LOOP/PROCEED
2861						PAGE		
2862					*			
2863					* BLOCK 124			
2864					*			
2865					* CHECK BIR FOR ADDER INPUTS OF A1=0, CS1=0, K1=1			
2866					*			
2867	00	0083A	6C000010	A	BLK124	RD,0	X'10'	
2868	00	0083B	6820083D	A		BCR,2	$+2	
2869	00	0083C	2E000000	A		WAIT		REPORT
2870	00	0083D	32100A28	A		LW,1	=X'124'	
2871	00	0083E	32000A29	A		LW,0	=X'3FFFFFFF'	A1=0
2872	00	0083F	65000844	A		BIR,0	$+5	REG 0 = 40000000
2873	00	00840	480009AE	A		EOR,0	=X'40000000'	SUM=40000000
2874	00	00841	69100843	A		BCS,1	$+2	NO
2875	00	00842	68200847	A		BCR,2	$+5	YES
2876	00	00843	65200844	A		BIR,2	$+1	
2877	00	00844	6C000010	A		RD,0	X'10'	
2878	00	00845	69100847	A		BCS,1	$+2	
2879	00	00846	2E000000	A		WAIT		ERROR HALT
2880	00	00847	6C000010	A		RD,0	X'10'	
2881	00	00848	6940083A	A		BCS,4	BLK124	LOOP/PROCEED
2882						PAGE		
2883					*			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2874					* BLOCK 125			
2875					*			
2876					* CHECK BIR FOR ADDER INPUTS OF A0=0, CS0=0, K0=1			
2877					*			
2878	00	00849	6C000010	A	BLK125	RD,0	X'10'	
2879	00	0084A	6820084C	A		BCR,2	*+2	
2880	00	0084B	2E000000	A		WAIT		REPORT
2881	00	0084C	32100A2A	A		LW,1	=X'125'	
2882	00	0084D	32000A28	A		LW,0	=X'7FFFFFFF'	A0=0
2883	00	0084E	65C00850	A		BIR,0	*+2	REG 0 = 80000000
2884	00	0084F	68000854	A		BCR,0	*+5	ERROR
2885	00	00850	480009B0	A		EOR,0	=X'80000000'	SUM=80000000
2886	00	00851	69100853	A		BCS,1	*+2	NO
2887	00	00852	68200857	A		BCR,2	*+5	YES
2888	00	00853	65200854	A		BIR,2	*+1	
2889	00	00854	6C000010	A		RD,0	X'10'	
2890	00	00855	69100857	A		BCS,1	*+2	
2891	00	00856	2E000000	A		WAIT		ERROR HALT
2892	00	00857	6C000010	A		RD,0	X'10'	
2893	00	00858	69400849	A		BCS,4	BLK125	LOOP/PROCEED
2894						PAGE		
2895					*			
2896					* BLOCK 126			
2897					*			
2898					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1011_{11} AND CHECK BCS,4			
2899					* FOR PROPER DETECTION OF UCC			
2900					*			
2901	00	00859	6C000010	A	BLK126	RD,0	X'10'	
2902	00	0085A	6820085C	A		BCR,2	*+2	
2903	00	0085B	2E000000	A		WAIT		REPORT
2904	00	0085C	32100A2C	A		LW,1	=X'126'	
2905	00	0085D	0E000860	A		LPSD,0	W1	SET CC=B, SET INHIBITS, SET P=W1+3
2906	00	0085E	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
2907						BOUND	8	
2908	00	00860	B0000863	A	W1	GEN,4,28	B,*+3	GENERATE PSW_1
2909	00	00861	07000000	A		DATA	X'7000000'	PSW2 TO SET INHIBITS
2910	00	00862	2E000000	A		WAIT		ERROR
2911	00	00863	69400865	A		BCS,4	*+2	ERROR IF BRANCH OCCURS
2912	00	00864	68000869	A		BCR,0	*+5	
2913	00	00865	65200866	A		BIR,2	*+1	ERROR DUE TO SET CONDITION OF CC_2
2914	00	00866	6C000010	A		RD,0	X'10'	
2915	00	00867	69100869	A		BCS,1	*+2	
2916	00	00868	2E000000	A		WAIT		ERROR HALT
2917	00	00869	6C000010	A		RD,0	X'10'	
2918	00	0086A	69400859	A		BCS,4	BLK126	LOOP/PROCEED
2919						PAGE		
2920					*			
2921					* BLOCK 127			
2922					*			
2923					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1011 AND CHECK BCR,4			
2924					* FOR PROPER DETECTION OF UCC			
2925					*			
2926	00	0086B	6C000010	A	BLK127	RD,0	X'10'	
2927	00	0086C	6820086E	A		BCR,2	*+2	
2928	00	0086D	2E000000	A		WAIT		REPORT
2929	00	0086E	32100A2D	A		LW,1	=X'127'	
2930	00	0086F	0E000872	A		LPSD,0	W2	SET CC=B, SET INHIBITS, SET P=W2+3
2931	00	00870	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
2932						BOUND	8	
2933	00	00872	B0000875	A	W2	GEN,4,28	B,*+3	GENERATE PSW_1
2934	00	00873	07000000	A		DATA	X'7000000'	PSW_2
2935	00	00874	2E000000	A		WAIT		ERROR
2936	00	00875	6840087A	A		BCR,4	*+5	
2937	00	00876	65200877	A		BIR,2	*+1	ERROR = CC_2 SET
2938	00	00877	6C000010	A		RD,0	X'10'	
2939	00	00878	6910087A	A		BCS,1	*+2	
2940	00	00879	2E000000	A		WAIT		ERROR HALT
2941	00	0087A	6C000010	A		RD,0	X'10'	
2942	00	0087B	6940086B	A		BCS,4	BLK127	LOOP/PROCEED
2943						PAGE		
2944					*			
2945					* BLOCK 128			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2946					*			
2947					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0111 AND CHECK BCS,8			
2948					* FOR PROPER DETECTION OF UCC			
2949					*			
2950	00	00870	6C000010	A	BLK128	RD,0	X'10'	
2951	00	00872	6820087F	A		BCR,2	$+2	
2952	00	00876	2E000000	A		WAIT		REPORT
2953	00	00878	32100A2E	A		LW,1	=X'128'	
2954	00	00880	0E000882	A		LPSD,0	W3	SET CC=7, SET INHIBITD, SET P=W3+3
2955	00	00881	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
2956						BOUND	8	
2957	00	00882	70000885	A	W3	GEN,4,28	7,$+3	GENERATE PSW1
2958	00	00883	07000000	A		DATA	X'7000000'	PSW2
2959	00	00884	2E000000	A		WAIT		ERROR
2960	00	00886	69800887	A		BCS,8	$+2	
2961	00	00886	68000888	A		BCR,0	$+5	
2962	00	00887	65200888	A		BIR,2	$+1	ERROR - CC_1 SET
2963	00	00888	6C000010	A		RD,0	X'10'	
2964	00	00889	6910088B	A		BCS,1	$+2	
2965	00	00888	2E000000	A		WAIT		ERROR HALT
2966	00	00888	6C000010	A		RD,0	X'10'	
2967	00	00880	6940087C	A		BCS,4	BLK128	LOOP/PROCEED
2968						PAGE		
2969					*			
2970					* BLOCK 129			
2971					*			
2972					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0111 AND CHECK BCR,8			
2973					* FOR PROPER DETECTION OF UCC			
2974					*			
2975	00	00880	6C000010	A	BLK129	RD,0	X'10'	
2976	00	00888	68200890	A		BCR,2	$+2	
2977	00	00889	2E000000	A		WAIT		REPORT
2978	00	00890	32100A2F	A		LW,1	=X'129'	
2979	00	00891	0E000894	A		LPSD,0	W4	SET CC=7, SET INHIBITS, SET P=W4+3
2980	00	00892	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
2981						BOUND	8	
2982	00	00894	70000897	A	W4	GEN,4,28	7,$+3	GENERATE PSW1
2983	00	00895	07000000	A		DATA	X'7000000'	PSW2
2984	00	00896	2E000000	A		WAIT		ERROR
2985	00	00897	6880089C	A		BCR,8	$+5	
2986	00	00898	65200899	A		BIR,2	$+1	ERROR - CC1 SET
2987	00	00899	6C000010	A		RD,0	X'10'	
2988	00	0089A	6910089C	A		BCS,1	$+2	
2989	00	0089B	2E000000	A		WAIT		ERROR HALT
2990	00	0089C	6C000010	A		RD,0	X'10'	
2991	00	0089D	6940088D	A		BCS,4	BLK129	LOOP/PROCEED
2992						PAGE		
2993					*			
2994					* BLOCK 130			
2995					*			
2996					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0100 AND CHECK BCR,4			
2997					* FOR PROPER DETECTION OF UCC			
2998					*			
2999	00	0089E	6C000010	A	BLK130	RD,0	X'10'	
3000	00	0089F	682008A1	A		BCR,2	$+2	
3001	00	008A0	2E000000	A		WAIT		REPORT
3002	00	008A1	32100A30	A		LW,1	=X'130'	
3003	00	008A2	0E0008A4	A		LPSD,0	W5	SET CC=4, SET INHIBITS, SET P=W5+3
3004	00	008A3	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
3005						BOUND	8	
3006	00	008A4	400008A7	A	W5	GEN,4,28	4,$+3	GENERATE PSW1
3007	00	008A5	07000000	A		DATA	X'7000000'	PSW2
3008	00	008A6	2E000000	A		WAIT		ERROR
3009	00	008A7	684008A9	A		BCR,4	$+2	
3010	00	008A8	680008AD	A		BCR,0	$+5	
3011	00	008A9	652008AA	A		BIR,2	$+1	ERROR - CC2 RESET
3012	00	008AA	6C000010	A		RD,0	X'10'	
3013	00	008AB	691008AD	A		BCS,1	$+2	
3014	00	008AC	2E000000	A		WAIT		ERROR HALT
3015	00	008AD	6C000010	A		RD,0	X'10'	
3016	00	008AE	6940089E	A		BCS,4	BLK130	LOOP/PROCEED
3017						PAGE		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3018					*			
3019					* BLOCK 131			
3020					*			
3021					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0100 AND CHECK BCS,4			
3022					* FOR PROPER DETECTION OF UCC			
3023					*			
3024	00	008AF	6C000010	A	BLK131	RD,0	X'10'	
3025	00	008B0	682008B2	A		BCR,2	$+2	
3026	00	008B1	2E000000	A		WAIT		REPORT
3027	00	008B2	32100A31	A		LW,1	=X'131'	
3028	00	008B3	0E0008B6	A		LPSD,0	W6	SET CC=4, SET INHIBITS, SET P=W6+3
3029	00	008B4	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
3030						BOUND	8	
3031	00	008B6	400008B9	A	W6	GEN,4,28	4,$+3	GENERATE PSW1
3032	00	008B7	07000000	A		DATA	X'7000000'	PSW2
3033	00	008B8	2E000000	A		WAIT		ERROR
3034	00	008B9	694008BE	A		BCS,4	$+5	
3035	00	008BA	652008BB	A		BIR,2	$+1	ERROR = CC2 RESET
3036	00	008BB	6C000010	A		RD,0	X'10'	
3037	00	008BC	691008BE	A		BCS,1	$+2	
3038	00	008BD	2E000000	A		WAIT		ERROR HALT
3039	00	008BE	6C000010	A		RD,0	X'10'	
3040	00	008BF	694008AF	A		BCS,4	BLK131	LOOP/PROCEED
3041						PAGE		
3042					*			
3043					* BLOCK 132			
3044					*			
3045					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1000 AND CHECK BCR,8			
3046					* FOR PROPER DETECTION OF UCC			
3047					*			
3048	00	008C0	6C000010	A	BLK132	RD,0	X'10'	
3049	00	008C1	682008C3	A		BCR,2	$+2	
3050	00	008C2	2E000000	A		WAIT		REPORT
3051	00	008C3	32100A32	A		LW,1	=X'132'	
3052	00	008C4	0E0008C6	A		LPSD,0	W7	SET CC=8, SET INHIBITS, SET P=W7+3
3053	00	008C5	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
3054						BOUND	8	
3055	00	008C6	800008C9	A	W7	GEN,4,28	8,$+3	GENERATE PSW1
3056	00	008C7	07000000	A		DATA	X'7000000'	PSW2
3057	00	008C8	2E000000	A		WAIT		ERROR
3058	00	008C9	688008CB	A		BCR,8	$+2	
3059	00	008CA	680008CF	A		BCR,0	$+5	
3060	00	008CB	652008CC	A		BIR,2	$+1	ERROR = CC1 RESET
3061	00	008CC	6C000010	A		RD,0	X'10'	
3062	00	008CD	691008CF	A		BCS,1	$+2	
3063	00	008CE	2E000000	A		WAIT		ERROR HALT
3064	00	008CF	6C000010	A		RD,0	X'10'	
3065	00	008D0	694008C0	A		BCS,4	BLK132	LOOP/PROCEED
3066						PAGE		
3067					*			
3068					* BLOCK 133			
3069					*			
3070					* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1000 AND CHECK BCS,8			
3071					* FOR PROPER DETECTION OF UCC			
3072					*			
3073	00	008D1	6C000010	A	BLK133	RD,0	X'10'	
3074	00	008D2	682008D4	A		BCR,2	$+2	
3075	00	008D3	2E000000	A		WAIT		REPORT
3076	00	008D4	32100A33	A		LW,1	=X'133'	
3077	00	008D5	0E0008D8	A		LPSD,0	W8	SET CC=7, SET INHIBITS, SET P=W8+3
3078	00	008D6	2E000000	A		WAIT		ERROR IN EXECUTION OF LPSD
3079						BOUND	8	
3080	00	008D8	800008DB	A	W8	GEN,4,28	8,$+3	GENERATE PSW1
3081	00	008D9	07000000	A		DATA	X'7000000'	PSW2
3082	00	008DA	2E000000	A		WAIT		ERROR
3083	00	008DB	698008E0	A		BCS,8	$+5	
3084	00	008DC	652008DD	A		BIR,2	$+1	ERROR = CC1 RESET
3085	00	008DD	6C000010	A		RD,0	X'10'	
3086	00	008DE	691008E0	A		BCS,1	$+2	
3087	00	008DF	2E000000	A		WAIT		ERROR HALT
3088	00	008E0	6C000010	A		RD,0	X'10'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3089	00	008E1	694008D1	A		BCS,4	BLK133	L88P/PR8CEED
3090						PAGE		
3091	00	008E2	6R000142	A		BCR,0	RETURN	
3092	00	008E3	2E000000	A		WAIT		
3093						PAGE		
3094					*			
3095					* TRAP PROCESSING SWITCH TO SET UP IDENTIFICATION OF SPURIOUS TRAPS			
3096					*			
3097						BOUND	8	
3098	00	008E4	00000000	A	NONOP	DATA	0	
3099	00	008E5	00000000	A		DATA	0	
3100	00	008E6	00000944	A		DATA	TRAP40	
3101	00	008E7	00000000	A		DATA	0	
3102	00	008E8	00000000	A	UNIMP	DATA	0	
3103	00	008E9	00000000	A		DATA	0	
3104	00	008EA	00000946	A		DATA	TRAP41	
3105	00	008EB	00000000	A		DATA	0	
3106	00	008EC	00000000	A	STACK	DATA	0	
3107	00	008ED	00000000	A		DATA	0	
3108	00	008EE	00000948	A		DATA	TRAP42	
3109	00	008EF	00000000	A		DATA	0	
3110	00	008F0	00000000	A	OFLO	DATA	0	
3111	00	008F1	00000000	A		DATA	0	
3112	00	008F2	0000094A	A		DATA	TRAP43	
3113	00	008F3	00000000	A		DATA	0	
3114	00	008F4	00000000	A	FLOAT	DATA	0	
3115	00	008F5	00000000	A		DATA	0	
3116	00	008F6	0000094C	A		DATA	TRAP44	
3117	00	008F7	00000000	A		DATA	0	
3118	00	008F8	00000000	A	DEC	DATA	0	
3119	00	008F9	00000000	A		DATA	0	
3120	00	008FA	0000094E	A		DATA	TRAP45	
3121	00	008FB	00000000	A		DATA	0	
3122	00	008FC	00000000	A	TIMER	DATA	0	
3123	00	008FD	00000000	A		DATA	0	
3124	00	008FE	00000950	A		DATA	TRAP46	
3125	00	008FF	00000000	A		DATA	0	
3126	00	00900	00000000	A	TUNASS	DATA	0	
3127	00	00901	00000000	A		DATA	0	
3128	00	00902	00000952	A		DATA	TRAPUN	
3129	00	00903	00000000	A		DATA	0	
3130						PAGE		
3131	00	00904	00000000	A	CALL1	DATA	0	
3132	00	00905	00000000	A		DATA	0	
3133	00	00906	00000954	A		DATA	TRAP48	
3134	00	00907	00000000	A		DATA	0	
3135	00	00908	00000000	A	CALL2	DATA	0	
3136	00	00909	00000000	A		DATA	0	
3137	00	0090A	00000956	A		DATA	TRAP49	
3138	00	0090B	00000000	A		DATA	0	
3139	00	0090C	00000000	A	CALL3	DATA	0	
3140	00	0090D	00000000	A		DATA	0	
3141	00	0090E	00000958	A		DATA	TRAP4A	
3142	00	0090F	00000000	A		DATA	0	
3143	00	00910	00000000	A	CALL4	DATA	0	
3144	00	00911	00000000	A		DATA	0	
3145	00	00912	0000095A	A		DATA	TRAP4B	
3146	00	00913	00000000	A		DATA	0	
3147						PAGE		
3148					*			
3149					* INTERRUPT SWITCH TO SET UP IDENTIFICATION OF SPURIOUS INTERRUPTS			
3150					*			
3151						BOUND	8	
3152	00	00914	00000000	A	POWON	DATA	0	
3153	00	00915	00000000	A		DATA	0	
3154	00	00916	0000095C	A		DATA	INT50	
3155	00	00917	00000000	A		DATA	0	
3156	00	00918	00000000	A	POWOFF	DATA	0	
3157	00	00919	00000000	A		DATA	0	
3158	00	0091A	0000095E	A		DATA	INT51	
3159	00	0091B	00000000	A		DATA	0	
3160	00	0091C	00000000	A	PULSE1	DATA	0	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3161	00	0091D	00000000	A	PULSE2	DATA	0	
3162	00	0091E	00000000	A	PULSE3	DATA	0	
3163	00	0091F	00000000	A	PULSE4	DATA	0	
3164	00	00920	00000000	A	MEMPAR	DATA	0	
3165	00	00921	00000000	A		DATA	0	
3166	00	00922	00000960	A		DATA	INT56	
3167	00	00923	00000000	A		DATA	0	
3168	00	00924	00000000	A	UNASIN	DATA	0	
3169	00	00925	00000000	A		DATA	0	
3170	00	00926	00000962	A		DATA	IUNASS	
3171	00	00927	00000000	A		DATA	0	
3172	00	00928	00000000	A	COUNT1	DATA	0	
3173	00	00929	00000000	A		DATA	0	
3174	00	0092A	00000964	A		DATA	INT58	
3175	00	0092B	00000000	A		DATA	0	
3176	00	0092C	00000000	A	COUNT2	DATA	0	
3177	00	0092D	00000000	A		DATA	0	
3178	00	0092E	00000966	A		DATA	INT59	
3179	00	0092F	00000000	A		DATA	0	
3180	00	00930	00000000	A	COUNT3	DATA	0	
3181	00	00931	00000000	A		DATA	0	
3182	00	00932	00000968	A		DATA	INT5A	
3183	00	00933	00000000	A		DATA	0	
3184						PAGE		
3185	00	00934	00000000	A	COUNT4	DATA	0	
3186	00	00935	00000000	A		DATA	0	
3187	00	00936	0000096A	A		DATA	INT5B	
3188	00	00937	00000000	A		DATA	0	
3189	00	00938	00000000	A	INOUT	DATA	0	
3190	00	00939	00000000	A		DATA	0	
3191	00	0093A	0000096C	A		DATA	INT5C	
3192	00	0093B	00000000	A		DATA	0	
3193	00	0093C	00000000	A	PANEL	DATA	0	
3194	00	0093D	00000000	A		DATA	0	
3195	00	0093E	0000096E	A		DATA	INT5D	
3196	00	0093F	00000000	A		DATA	0	
3197	00	00940	00000000	A	EXTERN	DATA	0	
3198	00	00941	00000000	A		DATA	0	
3199	00	00942	00000970	A		DATA	EXTINT	
3200	00	00943	00000000	A		DATA	0	
3201						PAGE		
3202					*			
3203					* TRAP HALTS FOR IDENTIFICATION OF SPURIOUS TRAPS			
3204					*			
3205	00	00944	2E000000	A	TRAP40	WAIT		NON-ALLOWED OPERATION
3206	00	00945	68000140	A		BCR,0	START	
3207	00	00946	2E000000	A	TRAP41	WAIT		UNIMPLEMENTED INSTRUCTION
3208	00	00947	68000140	A		BCR,0	START	
3209	00	00948	2E000000	A	TRAP42	WAIT		PUSH-DOWN STACK LIMIT REACHED
3210	00	00949	68000140	A		BCR,0	START	
3211	00	0094A	2E000000	A	TRAP43	WAIT		FIXED-POINT ARITHMETIC OVERFLOW
3212	00	0094B	68000140	A		BCR,0	START	
3213	00	0094C	2E000000	A	TRAP44	WAIT		FLOATING POINT FAULT
3214	00	0094D	68000140	A		BCR,0	START	
3215	00	0094E	2E000000	A	TRAP45	WAIT		DECIMAL ARITHMETIC FAULT
3216	00	0094F	68000140	A		BCR,0	START	
3217	00	00950	2E000000	A	TRAP46	WAIT		WATCHDOG TIMER RUNOUT
3218	00	00951	68000140	A		BCR,0	START	
3219	00	00952	2E000000	A	TRAPUN	WAIT		UNASSIGNED TRAP 47, 4C-4F
3220	00	00953	68000140	A		BCR,0	START	
3221	00	00954	2E000000	A	TRAP48	WAIT		CALL 1
3222	00	00955	68000140	A		BCR,0	START	
3223	00	00956	2E000000	A	TRAP49	WAIT		CALL 2
3224	00	00957	68000140	A		BCR,0	START	
3225	00	00958	2E000000	A	TRAP4A	WAIT		CALL 3
3226	00	00959	68000140	A		BCR,0	START	
3227	00	0095A	2E000000	A	TRAP4B	WAIT		CALL 4
3228	00	0095B	68000140	A		BCR,0	START	
3229						PAGE		
3230					*			
3231					* INTERRUPT HALTS FOR IDENTIFICATION OF SPURIOUS INTERRUPTS			
3232					*			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3233	00	0095C	2E000000	A	INT50	WAIT		POWER ON
3234	00	0095D	0E000972	A		LPSD,0	RESTART	
3235	00	0095E	2E000000	A	INT51	WAIT		POWER OFF
3236	00	0095F	0E000972	A		LPSD,0	RESTART	
3237	00	00960	2E000000	A	INT56	WAIT		MEMORY PARITY
3238	00	00961	0E000972	A		LPSD,0	RESTART	
3239	00	00962	2E000000	A	IUNASS	WAIT		UNASSIGNED INTERRUPT 57, 5E, OR 5F
3240	00	00963	0E000972	A		LPSD,0	RESTART	
3241	00	00964	2E000000	A	INT58	WAIT		COUNTER 1 ZERO
3242	00	00965	0E000972	A		LPSD,0	RESTART	
3243	00	00966	2E000000	A	INT59	WAIT		COUNTER 2 ZERO
3244	00	00967	0E000972	A		LPSD,0	RESTART	
3245	00	00968	2E000000	A	INT5A	WAIT		COUNTER 3 ZERO
3246	00	00969	0E000972	A		LPSD,0	RESTART	
3247	00	0096A	2E000000	A	INT5B	WAIT		COUNTER 4 ZERO
3248	00	00969	0E000972	A		LPSD,0	RESTART	
3249	00	0096C	2E000000	A	INT5C	WAIT		INPUT/OUTPUT
3250	00	0096D	0E000972	A		LPSD,0	RESTART	
3251	00	0096E	2E000000	A	INT5D	WAIT		PANEL INTERRUPT
3252	00	0096F	0E000972	A		LPSD,0	RESTART	
3253	00	00970	2E000000	A	EXTINT	WAIT		EXTERNAL GROUP 2-15
3254	00	00971	0E000972	A		LPSD,0	RESTART	
3255						PAGE		
3256						BOUND	8	
3257	00	00972	00000140	A	RESTART	DATA	START	
3258	00	00973	00000000	A		DATA	0	
3259	00	00974	00000000	A	T1	DATA	0	
3260		00 00140				END	START	
	00	00975	00000000	A				
	00	00976	00000001	A				
	00	00977	00000002	A				
	00	00978	00000003	A				
	00	00979	00000004	A				
	00	0097A	00000005	A				
	00	00978	00000008	A				
	00	0097C	00000006	A				
	00	0097D	00000010	A				
	00	0097E	00000007	A				
	00	0097F	00000020	A				
	00	00980	00000040	A				
	00	00981	00000009	A				
	00	00982	00000080	A				
	00	00983	00000100	A				
	00	00984	00000011	A				
	00	00985	00000200	A				
	00	00986	00000012	A				
	00	00987	00000400	A				
	00	00988	00000013	A				
	00	00989	00000800	A				
	00	0098A	00000014	A				
	00	0098B	00001000	A				
	00	0098C	00000015	A				
	00	0098D	00002000	A				
	00	0098E	00000016	A				
	00	0098F	00004000	A				
	00	00990	00000017	A				
	00	00991	00008000	A				
	00	00992	00000018	A				
	00	00993	00010000	A				
	00	00994	00000019	A				
	00	00995	00020000	A				
	00	00996	00040000	A				
	00	00997	00000021	A				
	00	00998	00080000	A				
	00	00999	00000022	A				
	00	0099A	00100000	A				
	00	0099B	00000023	A				
	00	0099C	00200000	A				
	00	0099D	00000024	A				
	00	0099E	00400000	A				
	00	0099F	00000025	A				
	00	009A0	00800000	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
	00	009A1	00000026	A				
	00	009A2	01000000	A				
	00	009A3	00000027	A				
	00	009A4	02000000	A				
	00	009A5	00000028	A				
	00	009A6	04000000	A				
	00	009A7	00000029	A				
	00	009A8	08000000	A				
	00	009A9	00000030	A				
	00	009AA	10000000	A				
	00	009AB	00000031	A				
	00	009AC	20000000	A				
	00	009AD	00000032	A				
	00	009AE	40000000	A				
	00	009AF	00000033	A				
	00	009B0	80000000	A				
	00	009B1	00000034	A				
	00	009B2	00000035	A				
	00	009B3	00000036	A				
	00	009B4	FFFFFFFF	A				
	00	009B5	00000037	A				
	00	009B6	00000038	A				
	00	009B7	00000039	A				
	00	009B8	00000041	A				
	00	009B9	00000042	A				
	00	009BA	00000043	A				
	00	009BB	00000044	A				
	00	009BC	00000045	A				
	00	009BD	00000046	A				
	00	009BE	00000047	A				
	00	009BF	00000048	A				
	00	009C0	00000049	A				
	00	009C1	00000050	A				
	00	009C2	00000051	A				
	00	009C3	00000052	A				
	00	009C4	00000053	A				
	00	009C5	00000054	A				
	00	009C6	00000055	A				
	00	009C7	00000056	A				
	00	009C8	00000057	A				
	00	009C9	00000058	A				
	00	009CA	00000059	A				
	00	009CB	00000060	A				
	00	009CC	00000061	A				
	00	009CD	00000062	A				
	00	009CE	00000063	A				
	00	009CF	00000064	A				
	00	009D0	00000065	A				
	00	009D1	00000066	A				
	00	009D2	00000067	A				
	00	009D3	00000068	A				
	00	009D4	00000069	A				
	00	009D5	00000070	A				
	00	009D6	A5A5A5A5	A				
	00	009D7	5A5AA5A5	A				
	00	009D8	FFFF0000	A				
	00	009D9	00000071	A				
	00	009DA	A5A55A5A	A				
	00	009DB	0000FFFF	A				
	00	009DC	00000072	A				
	00	009DD	5A5A5A5A	A				
	00	009DE	00000073	A				
	00	009DF	00000074	A				
	00	009E0	00000075	A				
	00	009E1	00000076	A				
	00	009E2	00000077	A				
	00	009E3	00000078	A				
	00	009E4	00000079	A				
	00	009E5	00000081	A				
	00	009E6	00000083	A				
	00	009E7	00000084	A				
	00	009E8	00000085	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
	00	009E9	00000086	A				
	00	009EA	00000087	A				
	00	009EB	00000088	A				
	00	009EC	00000089	A				
	00	009ED	00000090	A				
	00	009EE	00000091	A				
	00	009EF	00000092	A				
	00	009F0	00000093	A				
	00	009F1	FFFFFFFE	A				
	00	009F2	00000094	A				
	00	009F3	00000095	A				
	00	009F4	00000096	A				
	00	009F5	00000097	A				
	00	009F6	00000098	A				
	00	009F7	0000000F	A				
	00	009F8	00000099	A				
	00	009F9	0000001F	A				
	00	009FA	0000003F	A				
	00	009FB	00000101	A				
	00	009FC	0000007F	A				
	00	009FD	00000102	A				
	00	009FE	000000FF	A				
	00	009FF	00000103	A				
	00	00A00	000001FF	A				
	00	00A01	00000104	A				
	00	00A02	000003FF	A				
	00	00A03	00000105	A				
	00	00A04	000007FF	A				
	00	00A05	00000106	A				
	00	00A06	00000FFF	A				
	00	00A07	00000107	A				
	00	00A08	00001FFF	A				
	00	00A09	00000108	A				
	00	00A0A	00003FFF	A				
	00	00A0B	00000109	A				
	00	00A0C	00007FFF	A				
	00	00A0D	00000110	A				
	00	00A0E	00000111	A				
	00	00A0F	0001FFFF	A				
	00	00A10	00000112	A				
	00	00A11	0003FFFF	A				
	00	00A12	00000113	A				
	00	00A13	0007FFFF	A				
	00	00A14	00000114	A				
	00	00A15	000FFFFF	A				
	00	00A16	00000115	A				
	00	00A17	001FFFFF	A				
	00	00A18	00000116	A				
	00	00A19	003FFFFF	A				
	00	00A1A	00000117	A				
	00	00A1B	007FFFFF	A				
	00	00A1C	00000118	A				
	00	00A1D	00FFFFFF	A				
	00	00A1E	00000119	A				
	00	00A1F	01FFFFFF	A				
	00	00A20	00000120	A				
	00	00A21	03FFFFFF	A				
	00	00A22	00000121	A				
	00	00A23	07FFFFFF	A				
	00	00A24	00000122	A				
	00	00A25	0FFFFFFF	A				
	00	00A26	00000123	A				
	00	00A27	1FFFFFFF	A				
	00	00A28	00000124	A				
	00	00A29	3FFFFFFF	A				
	00	00A2A	00000125	A				
	00	00A2B	7FFFFFFF	A				
	00	00A2C	00000126	A				
	00	00A2D	00000127	A				
	00	00A2E	00000128	A				
	00	00A2F	00000129	A				
	00	00A30	00000130	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
	00	00A31	00000131	A				
	00	00A32	00000132	A				
	00	00A33	00000133	A				
CONTROL SECTION SUMMARY: 01 00000 PT 0								

SECTION V
CONCORDANCE LISTING

```
                                SIGMA 5/7 CPU TEST-VERIFY  704042-51D00
A
          40-EQU
B
          41-EQU          2908/GEN        2933/GEN
BLK1
         325-RD            337/BCS
BLK10
         504-RD            517/BCS
BLK100
        2353-RD           2367/BCS
BLK101
        2374-RD           2388/BCS
BLK102
        2395-RD           2409/BCS
BLK103
        2416-RD           2430/BCS
BLK104
        2437-RD           2451/BCS
BLK105
        2458-RD           2472/BCS
BLK106
        2479-RD           2493/BCS
BLK107
        2500-RD           2514/BCS
BLK108
        2521-RD           2535/BCS
BLK109
        2542-RD           2556/BCS
BLK11
         524-RD            537/BCS
BLK110
        2563-RD           2577/BCS
BLK111
        2584-RD           2598/BCS
BLK112
        2605-RD           2619/BCS
BLK113
        2626-RD           2640/BCS
BLK114
        2647-RD           2661/BCS
BLK115
        2668-RD           2682/BCS
BLK116
        2689-RD           2703/BCS
BLK117
        2710-RD           2724/BCS
BLK118
        2731-RD           2745/BCS
BLK119
        2752-RD           2766/BCS
BLK12
         544-RD            557/BCS
BLK120
        2773-RD           2787/BCS
BLK121
        2794-RD           2808/BCS
BLK122
        2815-RD           2829/BCS
BLK123
        2836-RD           2850/BCS
BLK124
        2857-RD           2871/BCS
BLK125
        2878-RD           2893/BCS
BLK126
        2901-RD           2918/BCS
BLK127
        2926-RD           2942/BCS
BLK128
        2950-RD           2967/BCS
BLK129
        2975-RD           2991/BCS
```

```
BLK13
        564*RD          577/BCS
BLK130
        2999*RD         3016/BCS
BLK131
        3024*RD         3040/BCS
BLK132
        3048*RD         3065/BCS
BLK133
        3073*RD         3089/BCS
BLK14
        584*RD          597/BCS
BLK15
        604*RD          617/BCS
BLK16
        624*RD          637/BCS
BLK17
        644*RD          657/BCS
BLK18
        664*RD          677/BCS
BLK19
        684*RD          697/BCS
BLK2
        344*RD          357/BCS
BLK20
        704*RD          717/BCS
BLK21
        724*RD          737/BCS
BLK22
        744*RD          757/BCS
BLK23
        764*RD          777/BCS
BLK24
        784*RD          797/BCS
BLK25
        804*RD          817/BCS
BLK26
        824*RD          837/BCS
BLK27
        844*RD          857/BCS
BLK28
        864*RD          877/BCS
BLK29
        884*RD          897/BCS
BLK3
        364*RD          377/BCS
BLK30
        904*RD          917/BCS
BLK31
        924*RD          937/BCS
BLK32
        944*RD          957/BCS
BLK33
        964*RD          977/BCS
BLK34
        984*RD          997/BCS
BLK35
        1005*RD         1018/BCS
BLK36
        1026*RD         1040/BCS
BLK37
        1047*RD         1060/BCS
BLK38
        1067*RD         1080/BCS
BLK39
        1087*RD         1100/BCS
BLK4
        384*RD          397/BCS
BLK40
        1107*RD         1120/BCS
BLK41
        1127*RD         1140/BCS
BLK42
        1147*RD         1160/BCS
BLK43
        1167*RD         1180/BCS
```

```
BLK44
        1187*RD         1200/BCS
BLK45
        1207*RD         1220/BCS
BLK46
        1227*RD         1240/BCS
BLK47
        1247*RD         1260/BCS
BLK48
        1267*RD         1280/BCS
BLK49
        1287*RD         1300/BCS
BLK5
         404*RD          417/BCS
BLK50
        1307*RD         1320/BCS
BLK51
        1327*RD         1340/BCS
BLK52
        1347*RD         1360/BCS
BLK53
        1367*RD         1380/BCS
BLK54
        1387*RD         1400/BCS
BLK55
        1407*RD         1420/BCS
BLK56
        1427*RD         1440/BCS
BLK57
        1447*RD         1460/BCS
BLK58
        1467*RD         1480/BCS
BLK59
        1487*RD         1500/BCS
BLK6
         424*RD          437/BCS
BLK60
        1507*RD         1520/BCS
BLK61
        1527*RD         1540/BCS
BLK62
        1547*RD         1560/BCS
BLK63
        1567*RD         1580/BCS
BLK64
        1587*RD         1600/BCS
BLK65
        1607*RD         1620/BCS
BLK66
        1627*RD         1640/BCS
BLK67
        1647*RD         1660/BCS
BLK68
        1667*RD         1680/BCS
BLK69
        1687*RD         1701/BCS
BLK7
         444*RD          457/BCS
BLK70
        1709*RD         1724/BCS
BLK71
        1732*RD         1747/BCS
BLK72
        1755*RD         1770/BCS
BLK73
        1778*RD         1793/BCS
BLK74
        1801*RD         1815/BCS
BLK75
        1823*RD         1837/BCS
BLK76
        1845*RD         1859/BCS
BLK77
        1867*RD         1881/BCS
BLK78
        1888*RD         1901/BCS
```

```
BLK79
        1908*RD         1921/BCS
BLK8
         464*RD          477/BCS
BLK80
        1928*RD         1941/BCS
BLK81
        1948*RD         1962/BCS
BLK82
        1969*RD         1987/BCS
BLK83
        1994*RD         2013/BCS
BLK84
        2020*RD         2038/BCS
BLK85
        2045*RD         2062/BCS
BLK86
        2069*RD         2080/BCS
BLK87
        2087*RD         2098/BCS
BLK88
        2105*RD         2117/BCS
BLK89
        2124*RD         2137/BCS
BLK9
         484*RD          497/BCS
BLK90
        2144*RD         2157/BCS
BLK91
        2164*RD         2176/BCS
BLK92
        2183*RD         2197/BCS
BLK93
        2204*RD         2219/BCS
BLK94
        2226*RD         2240/BCS
BLK95
        2248*RD         2262/BCS
BLK96
        2269*RD         2283/BCS
BLK97
        2290*RD         2304/BCS
BLK98
        2311*RD         2325/BCS
BLK99
        2332*RD         2346/BCS
C
          42*EQU
CALL1
          60/XPSD       3131*DATA
CALL2
          61/XPSD       3135*DATA
CALL3
          62/XPSD       3139*DATA
CALL4
          63/XPSD       3143*DATA
COUNT1
          80/XPSD       3172*DATA
COUNT2
          81/XPSD       3176*DATA
COUNT3
          82/XPSD       3180*DATA
COUNT4
          83/XPSD       3185*DATA
D
          43*EQU
DEC
          57/XPSD       3118*DATA
E
          44*EQU
EXTERN
          88/XPSD         89/XPSD         90/XPSD         91/XPSD         92/XPSD         93/XPSD         94/XPSD
          95/XPSD         96/XPSD         97/XPSD         98/XPSD         99/XPSD        100/XPSD        101/XPSD
         102/XPSD        103/XPSD        104/XPSD        105/XPSD        106/XPSD        107/XPSD        108/XPSD
         109/XPSD        110/XPSD        111/XPSD        112/XPSD        113/XPSD        114/XPSD        115/XPSD
         116/XPSD        117/XPSD        118/XPSD        119/XPSD        120/XPSD        121/XPSD        122/XPSD
         123/XPSD        124/XPSD        125/XPSD        126/XPSD        127/XPSD        128/XPSD        129/XPSD
```

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        130/XPSD        131/XPSD        132/XPSD        133/XPSD        134/XPSD        135/XPSD        136/XPSD
        137/XPSD        138/XPSD        139/XPSD        140/XPSD        141/XPSD        142/XPSD        143/XPSD
        144/XPSD        145/XPSD        146/XPSD        147/XPSD        148/XPSD        149/XPSD        150/XPSD
        151/XPSD        152/XPSD        153/XPSD        154/XPSD        155/XPSD        156/XPSD        157/XPSD
        158/XPSD        159/XPSD        160/XPSD        161/XPSD        162/XPSD        163/XPSD        164/XPSD
        165/XPSD        166/XPSD        167/XPSD        168/XPSD        169/XPSD        170/XPSD        171/XPSD
        172/XPSD        173/XPSD        174/XPSD        175/XPSD        176/XPSD        177/XPSD        178/XPSD
        179/XPSD        180/XPSD        181/XPSD        182/XPSD        183/XPSD        184/XPSD        185/XPSD
        186/XPSD        187/XPSD        188/XPSD        189/XPSD        190/XPSD        191/XPSD        192/XPSD
        193/XPSD        194/XPSD        195/XPSD        196/XPSD        197/XPSD        198/XPSD        199/XPSD
        200/XPSD        201/XPSD        202/XPSD        203/XPSD        204/XPSD        205/XPSD        206/XPSD
        207/XPSD        208/XPSD        209/XPSD        210/XPSD        211/XPSD        212/XPSD        213/XPSD
        214/XPSD        215/XPSD        216/XPSD        217/XPSD        218/XPSD        219/XPSD        220/XPSD
        221/XPSD        222/XPSD        223/XPSD        224/XPSD        225/XPSD        226/XPSD        227/XPSD
        228/XPSD        229/XPSD        230/XPSD        231/XPSD        232/XPSD        233/XPSD        234/XPSD
        235/XPSD        236/XPSD        237/XPSD        238/XPSD        239/XPSD        240/XPSD        241/XPSD
        242/XPSD        243/XPSD        244/XPSD        245/XPSD        246/XPSD        247/XPSD        248/XPSD
        249/XPSD        250/XPSD        251/XPSD        252/XPSD        253/XPSD        254/XPSD        255/XPSD
        256/XPSD        257/XPSD        258/XPSD        259/XPSD        260/XPSD        261/XPSD        262/XPSD
        263/XPSD        264/XPSD        265/XPSD        266/XPSD        267/XPSD        268/XPSD        269/XPSD
        270/XPSD        271/XPSD        272/XPSD        273/XPSD        274/XPSD        275/XPSD        276/XPSD
        277/XPSD        278/XPSD        279/XPSD        280/XPSD        281/XPSD        282/XPSD        283/XPSD
        284/XPSD        285/XPSD        286/XPSD        287/XPSD        288/XPSD        289/XPSD        290/XPSD
        291/XPSD        292/XPSD        293/XPSD        294/XPSD        295/XPSD        296/XPSD        297/XPSD
        298/XPSD        299/XPSD        300/XPSD        301/XPSD        302/XPSD        303/XPSD        304/XPSD
        305/XPSD        306/XPSD        307/XPSD        308/XPSD        309/XPSD        310/XPSD        311/XPSD
      3197*DATA
EXTINT
      3199/DATA       3253*WAIT
F
        45*EQU
FLOAT
        56/XPSD       3114*DATA
INOUT
        84/XPSD       3189*DATA
INT5A
      3182/DATA       3245*WAIT
INT5B
      3187/DATA       3247*WAIT
INT5C
      3191/DATA       3249*WAIT
INT5D
      3195/DATA       3251*WAIT
INT50
      3154/DATA       3233*WAIT
INT51
      3158/DATA       3235*WAIT
INT56
      3166/DATA       3237*WAIT
INT58
      3174/DATA       3241*WAIT
INT59
      3178/DATA       3243*WAIT
IUNASS
      3170/DATA       3239*WAIT
MEMPAR
        78/XPSD       3164*DATA
NONOP
        52/XPSD       3098*DATA
OFLO
        55/XPSD       3110*DATA
PAGE
         6/OPEN
PAGE
         6/OPEN          7*CNAME
PANEL
        85/XPSD       3193*DATA
POWOFF
        73/XPSD       3156*DATA
POWON
        72/XPSD       3152*DATA
PULSE1
        74/MTW        3160*DATA
PULSE2
        75/MTW        3161*DATA
PULSE3
        76/MTW        3162*DATA
```

```
PULSE4
        77/MTW          3163*DATA
RESTART
        3234/LPSD       3236/LPSD       3238/LPSD       3240/LPSD       3242/LPSD       3244/LPSD       3246/LPSD
        3248/LPSD       3250/LPSD       3252/LPSD       3254/LPSD       3257*DATA
RETURN
        318*BIR         3091/BCR
SPINTR
        47*ASECT
STACK
        54/XPSD         3106*DATA
START
        316*LW          3206/BCR        3208/BCR        3210/BCR        3212/BCR        3214/BCR        3216/BCR
        3218/BCR        3220/BCR        3222/BCR        3224/BCR        3226/BCR        3228/BCR        3257/DATA
        3260/END
TIMER
        58/XPSD         3122*DATA
TRAPUN
        3128/DATA       3219*WAIT
TRAP4A
        3141/DATA       3225*WAIT
TRAP4B
        3145/DATA       3227*WAIT
TRAP40
        3100/DATA       3205*WAIT
TRAP41
        3104/DATA       3207*WAIT
TRAP42
        3108/DATA       3209*WAIT
TRAP43
        3112/DATA       3211*WAIT
TRAP44
        3116/DATA       3213*WAIT
TRAP45
        3120/DATA       3215*WAIT
TRAP46
        3124/DATA       3217*WAIT
TRAP48
        3133/DATA       3221*WAIT
TRAP49
        3137/DATA       3223*WAIT
TUNASS
        59/XPSD         64/XPSD         65/XPSD         66/XPSD         67/XPSD         3126*DATA
T1
        1953/STW        1954/LW         1974/STW        1976/STW        1978/LW         2000/STW        2002/STW
        2004/LW         2026/STW        2028/STW        2030/LW         2050/STW        2052/STW        2054/LW
        3259*DATA
UNASIN
        79/XPSD         86/XPSD         87/XPSD         3168*DATA
UNIMP
        53/XPSD         3102*DATA
W1
        2905/LPSD       2908*GEN
W2
        2930/LPSD       2933*GEN
W3
        2954/LPSD       2957*GEN
W4
        2979/LPSD       2982*GEN
W5
        3003/LPSD       3006*GEN
W6
        3028/LPSD       3031*GEN
W7
        3052/LPSD       3055*GEN
W8
        3077/LPSD       3080*GEN
$
        318/BIR         326/BCR         330/BCS         331/BCR         332/BIR         334/BCS         345/BCR
        350/BCS         351/BCS         352/BIR         354/BCS         365/BCR         370/BCS         371/BCS
        372/BIR         374/BCS         385/BCR         390/BCS         392/BCS         394/BCS         405/BCR
        410/BCS         411/BCS         412/BIR         414/BCS         425/BCR         430/BCS         431/BCS
        432/BIR         434/BCS         445/BCR         450/BCS         451/BCS         452/BIR         454/BCS
        465/BCR         470/BCS         471/BCS         472/BIR         474/BCS         485/BCR         490/BCS
        491/BCS         492/BIR         494/BCS         505/BCR         510/BCS         511/BCS         512/BIR
        514/BCS         525/BCR         530/BCS         531/BCS         532/BIR         534/BCS         545/BCR
        550/BCS         551/BCS         552/BIR         554/BCS         565/BCR         570/BCS         571/BCS
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572/BIR	574/BCS	585/BCR	590/BCS	591/BCS	592/BIR	594/BCS
605/BCR	610/BCS	611/BCS	612/BIR	614/BCS	625/BCR	630/BCS
631/BCS	632/BIR	634/BCS	645/BCR	650/BCS	651/BCS	652/BIR
654/BCS	665/BCR	670/BCS	671/BCS	672/BIR	674/BCS	685/BCR
690/BCS	691/BCS	692/BIR	694/BCS	705/BCR	710/BCS	711/BCS
712/BIR	714/BCS	725/BCR	730/BCS	731/BCS	732/BIR	734/BCS
745/BCR	750/BCS	751/BCS	752/BIR	754/BCS	765/BCR	770/BCS
771/BCS	772/BIR	774/BCS	785/BCR	790/BCS	791/BCS	792/BIR
794/BCS	805/BCR	810/BCS	811/BCS	812/BIR	814/BCS	825/BCR
830/BCS	831/BCS	832/BIR	834/BCS	845/BCR	850/BCS	851/BCS
852/BIR	854/BCS	865/BCR	870/BCS	871/BCS	872/BIR	874/BCS
885/BCR	890/BCS	891/BCS	892/BIR	894/BCS	905/BCR	910/BCS
911/BCS	912/BIR	914/BCS	925/BCR	930/BCS	931/BCS	932/BIR
934/BCS	945/BCR	950/BCS	951/BCS	952/BIR	954/BCS	965/BCR
970/BCR	971/BCR	972/BIR	974/BCS	985/BCR	990/BCS	991/BCR
992/BIR	994/BCS	1006/BCR	1011/BCS	1012/BCR	1013/BIR	1015/BCS
1027/BCR	1033/BCS	1034/BCR	1035/BIR	1037/BCS	1048/BCR	1053/BCS
1054/BCS	1055/BIR	1057/BCS	1068/BCR	1073/BCS	1074/BCS	1075/BIR
1077/BCS	1088/BCR	1093/BCS	1094/BCS	1095/BIR	1097/BCS	1108/BCR
1113/BCS	1114/BCS	1115/BIR	1117/BCS	1128/BCR	1133/BCS	1134/BCS
1135/BIR	1137/BCS	1148/BCR	1153/BCS	1154/BCS	1155/BIR	1157/BCS
1168/BCR	1173/BCS	1174/BCS	1175/BIR	1177/BCS	1188/BCR	1193/BCS
1194/BCS	1195/BIR	1197/BCS	1208/BCR	1213/BCS	1214/BCS	1215/BIR
1217/BCS	1228/BCR	1233/BCS	1234/BCS	1235/BIR	1237/BCS	1248/BCR
1253/BCS	1254/BCS	1255/BIR	1257/BCS	1268/BCR	1273/BCS	1274/BCS
1275/BIR	1277/BCS	1288/BCR	1293/BCS	1294/BCS	1295/BIR	1297/BCS
1308/BCR	1313/BCS	1314/BCS	1315/BIR	1317/BCS	1328/BCR	1333/BCS
1334/BCS	1335/BIR	1337/BCS	1348/BCR	1353/BCS	1354/BCS	1355/BIR
1357/BCS	1368/BCR	1373/BCS	1374/BCS	1375/BIR	1377/BCS	1388/BCR
1393/BCS	1394/BCS	1395/BIR	1397/BCS	1408/BCR	1413/BCS	1414/BCS
1415/BIR	1417/BCS	1428/BCR	1433/BCS	1434/BCS	1435/BIR	1437/BCS
1448/BCR	1453/BCS	1454/BCS	1455/BIR	1457/BCS	1468/BCR	1473/BCS
1474/BCS	1475/BIR	1477/BCS	1488/BCR	1493/BCS	1494/BCS	1495/BIR
1497/BCS	1508/BCR	1513/BCS	1514/BCS	1515/BIR	1517/BCS	1528/BCR
1533/BCS	1534/BCS	1535/BIR	1537/BCS	1548/BCR	1553/BCS	1554/BCS
1555/BIR	1557/BCS	1568/BCR	1573/BCS	1574/BCS	1575/BIR	1577/BCS
1588/BCR	1593/BCS	1594/BCS	1595/BIR	1597/BCS	1608/BCR	1613/BCS
1614/BCS	1615/BIR	1617/BCS	1628/BCR	1633/BCS	1634/BCS	1635/BIR
1637/BCS	1648/BCR	1653/BCS	1654/BCS	1655/BIR	1657/BCS	1668/BCR
1673/BCR	1674/BCR	1675/BIR	1677/BCS	1688/BCR	1694/BCS	1695/BCR
1696/BIR	1698/BCS	1710/BCR	1717/BCS	1718/BCR	1719/BIR	1721/BCS
1733/BCR	1740/BCS	1741/BCR	1742/BIR	1744/BCS	1756/BCR	1763/BCS
1764/BCR	1765/BIR	1767/BCS	1779/BCR	1786/BCS	1787/BCR	1788/BIR
1790/BCS	1802/BCR	1808/BCS	1809/BCR	1810/BIR	1812/BCS	1824/BCR
1830/BCS	1831/BCR	1832/BIR	1834/BCS	1846/BCR	1852/BCS	1853/BCR
1854/BIR	1856/BCS	1868/BCR	1874/BCS	1875/BCR	1876/BIR	1878/BCS
1889/BCR	1894/BCS	1895/BCR	1896/BIR	1898/BCS	1909/BCR	1914/BCS
1915/BCS	1916/BIR	1918/BCS	1929/BCR	1934/BCR	1935/BCR	1936/BIR
1938/BCS	1949/BCR	1955/BCS	1956/BCR	1957/BIR	1959/BCS	1970/BCR
1980/BCS	1981/BCR	1982/BIR	1984/BCS	1995/BCR	2006/BCS	2007/BCR
2008/BIR	2010/BCS	2021/BCR	2031/BCS	2032/BCR	2033/BIR	2035/BCS
2046/BCR	2055/BCS	2056/BCR	2057/BIR	2059/BCS	2070/BCR	2074/BCS
2075/BIR	2077/BCS	2088/BCR	2092/BCR	2093/BIR	2095/BCS	2106/BCR
2110/BCS	2111/BCR	2112/BIR	2114/BCS	2125/BCR	2130/BCR	2131/BCR
2132/BIR	2134/BCS	2145/BCR	2150/BCS	2151/BCR	2152/BIR	2154/BCS
2165/BCR	2169/BCS	2170/BCR	2171/BIR	2173/BCS	2184/BCR	2188/BIR
2190/BCS	2191/BCR	2192/BIR	2194/BCS	2205/BCR	2209/BIR	2210/BCR
2212/BCS	2213/BCR	2214/BIR	2216/BCS	2227/BCR	2231/BIR	2233/BCS
2234/BCR	2235/BIR	2237/BCS	2249/BCR	2253/BIR	2255/BCS	2256/BCR
2257/BIR	2259/BCS	2270/BCR	2274/BIR	2276/BCS	2277/BCR	2278/BIR
2280/BCS	2291/BCR	2295/BIR	2297/BCS	2298/BCR	2299/BIR	2301/BCS
2312/BCR	2316/BIR	2318/BCS	2319/BCR	2320/BIR	2322/BCS	2333/BCR
2337/BIR	2339/BCS	2340/BCR	2341/BIR	2343/BCS	2354/BCR	2358/BIR
2360/BCS	2361/BCR	2362/BIR	2364/BCS	2375/BCR	2379/BIR	2381/BCS
2382/BCR	2383/BIR	2385/BCS	2396/BCR	2400/BIR	2402/BCS	2403/BCR
2404/BIR	2406/BCS	2417/BCR	2421/BIR	2423/BCS	2424/BCR	2425/BIR
2427/BCS	2438/BCR	2442/BIR	2444/BCS	2445/BCR	2446/BIR	2448/BCS
2459/BCR	2463/BIR	2465/BCS	2466/BCR	2467/BIR	2469/BCS	2480/BCR
2484/BIR	2486/BCS	2487/BCR	2488/BIR	2490/BCS	2501/BCR	2505/BIR
2507/BCS	2508/BCR	2509/BIR	2511/BCS	2522/BCR	2526/BIR	2528/BCS
2529/BCR	2530/BIR	2532/BCS	2543/BCR	2547/BIR	2549/BCS	2550/BCR
2551/BIR	2553/BCS	2564/BCR	2568/BIR	2570/BCS	2571/BCR	2572/BIR
2574/BCS	2585/BCR	2589/BIR	2591/BCS	2592/BCR	2593/BIR	2595/BCS
2606/BCR	2610/BIR	2612/BCS	2613/BCR	2614/BIR	2616/BCS	2627/BCR
2631/BIR	2633/BCS	2634/BCR	2635/BIR	2637/BCS	2648/BCR	2652/BIR
2654/BCS	2655/BCR	2656/BIR	2658/BCS	2669/BCR	2673/BIR	2675/BCS
2676/BCR	2677/BIR	2679/BCS	2690/BCR	2694/BIR	2696/BCS	2697/BCR

2698/BIR	2700/BCS	2711/BCR	2715/BIR	2717/BCS	2718/BCR	2719/BIR
2721/BCS	2732/BCR	2736/BIR	2738/BCS	2739/BCR	2740/BIR	2742/BCS
2753/BCR	2757/BIR	2759/BCS	2760/BCR	2761/BIR	2763/BCS	2774/BCR
2778/BIR	2780/BCS	2781/BCR	2782/BIR	2784/BCS	2795/BCR	2799/BIR
2801/BCS	2802/BCR	2803/BIR	2805/BCS	2816/BCR	2820/BIR	2822/BCS
2823/BCR	2824/BIR	2826/BCS	2837/BCR	2841/BIR	2843/BCS	2844/BCR
2845/BIR	2847/BCS	2858/BCR	2862/BIR	2864/BCS	2865/BCR	2866/BIR
2868/BCS	2879/BCR	2883/BIR	2884/BCR	2886/BCS	2887/BCR	2888/BIR
2890/BCS	2902/BCR	2908/GEN	2911/BCS	2912/BCR	2913/BIR	2915/BCS
2927/BCR	2933/GEN	2936/BCR	2937/BIR	2939/BCS	2951/BCR	2957/GEN
2960/BCS	2961/BCR	2962/BIR	2964/BCS	2976/BCR	2982/GEN	2985/BCR
2986/BIR	2988/BCS	3000/BCR	3006/GEN	3009/BCR	3010/BCR	3011/BIR
3013/BCS	3025/BCR	3031/GEN	3034/BCS	3035/BIR	3037/BCS	3049/BCR
3055/GEN	3058/BCR	3059/BCR	3060/BIR	3062/BCS	3074/BCR	3080/GEN
3083/BCS	3084/BIR	3086/BCS				