

CLEAR STORAGE 1 ,008015,019026,030,034041,045,053,0570571026 1
 CLEAR STORAGE 2 L068112,102106,113/101099/Z99,027A070028)027B0010270B0261,001/001113I0 2
 BOOTSTRAP ,008015,022029,036040,047054,061068,072/061039 ,0010011040 3

READ TEST TAPE ROUTINE 5300F PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101				JOB	READ TEST TAPE ROUTINE						
102				CTL	221						
103				*							
104				*	THIS ENCOMPASSES 5300E AND 5310E FROM THE DIAGNOSTICS.						
105				*	IT ASSUMES THE AUTOCODER LOADER CLEARS CORE, SO IT DOESN'T						
106				*	NEED TO POSTPONE LOADING THE TAPE LOADER.						
107				*							
108				NRTAPE	EQU 1 TAPE DRIVE TO READ			0001			
109				NWTAPE	EQU 1 TAPE DRIVE TO WRITE			0001			
110				*							
111				*	THIS IS THE TAPE LOADER, WHICH IS WRITTEN IN THE FIRST TAPE BLOCK.						
112				*							
113				*	A BRANCH TO HERE IS PLANTED IN 1-5 BEFORE THE BLOCK IS WRITTEN,						
114				*	SO THIS IS WHERE THE DIAGNOSTIC TAPE STARTS EXECUTING WHEN IT						
115				*	IS LOADED.						
116				*							
117				ORG	1280				1280		
118	1	280	BEGLDR	H	*&1 BEGIN THE LOADER HERE	4		1280	. S84		4
119	1	284		SW	GMWM	4		1284	, T98		4
120				*							
121				*	PROGRAMS COME HERE TO LOAD DETAIL RECORDS OR THE NEXT PROGRAM.						
122				*	THIS HAS TO BE AT 1288 BECAUSE THE TRAILER CARD AFTER EACH						
123				*	PROGRAM MEDDLES WITH THE PROGRAM'S READ ROUTINE TO PLANT A						
124				*	BRANCH TO HERE.						
125				*							
126	1	288	LOAD	CS	81 ENSURE NO GMWM IN 1-81	4		1288	/ 081		4
127	1	292		RTW	NRTAPE,1	8		1292	L %U1 001 R		4
128	1	300		LCA	GMWM&1 SET GMWM AFTER INPUT	4		1300	L T99		4
129	1	304		BER	RTAPER	5		1304	B T56 L		4
130	1	309		BEF	RTAPEF	5		1309	B T66 K		4
131	1	314		BCE	LOAD,80,A TITLE CARD OF PROGRAM?	8		1314	B S88 080 A		5
132	1	322		SW	1273	4		1322	, S73		5
133	1	326		C	76,1276 CHECK IF DESIRED/EXCLUDED BLOCK	7		1326	C 076 S76		5
134	1	333		BSS	GOEQ,F	5		1333	B T47 F		5
135	1	338		BU	377 RUN TEST IF NOT EXCLUDED	5		1338	B 377 /		5
136	1	343		B	LOAD LOAD THE NEXT ONE	4		1343	B S88		5
137	1	347	GOEQ	BU	LOAD LOAD NEXT ONE IF THIS ONE IS NOT DESIRED	5		1347	B S88 /		5
138	1	362		B	377 RUN TEST IF DESIRED ONE	4		1352	B 377		6
139	1	356	RTAPER	BSP	NRTAPE ERROR DURING READ	5		1356	U %U1 B		6
140	1	361		NOF	PATCH IN A HALT HERE IF YOU FEEL LIKE IT	1		1361	N		6
141	1	362		B	LOAD	4		1362	B S88		6
142	1	366	RTAPEF	RWD	NRTAPE END-OF-FILE DURING READ	5		1366	U %U1 R		6
143	1	371		NOF	PATCH IN A HALT HERE IF YOU FEEL LIKE IT	1		1371	N		6
144	1	372		B	LOAD	4		1372	B S88		6
145				DCW	#22	22		1397			7
146				*							
147				*	THIS GMWM NOT ONLY STOPS THE WRITING OF BLOCKS TO TAPE, BUT						

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
148					* IT ALSO TELLS THE TRAILER CARD AFTER A PROGRAM TO GO TO THE						
149					* WRITE-THE-PROGRAM ROUTINE AT ,WPROG, AFTER LOADING THE PROGRAM,						
150					* INSTEAD OF RUNNING IT.						
151					*						
152					* IT HAS TO BE AT 1398.						
153					*						
154	1	398	GMWM	DCW	@}@			1 1398		GMARK	7

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
155				JOB	WRITE TEST TAPE ROUTINE						
156				*							
157				*	HERE'S THE CODE TO LOAD THE PROGRAMS AND WRITE THE TAPE.						
158				*							
159				*	THE FIRST RECORD ON THE TAPE IS THE TAPE READ ROUTINE.						
160				*							
161				*	BEFORE EACH PROGRAM THERE IS AN 80-CHARACTER RECORD WITH ,A, IN						
162				*	COLUMN 80, WHICH IS THE SET-WORD-MARK CARD FROM THE PROGRAM DECK.						
163				*	THE PROGRAM ID NUMBER IS IN COLUMNS 73-76, AND THE VERSION IN 77.						
164				*							
165				*	THEN THE PROGRAM ITSELF AS A 1250-CHARACTER RECORD.						
166				*							
167				*	THEN THE PROGRAM'S DETAIL RECORDS, IF ANY, AS 80-CHARACTER RECORDS.						
168				*							
169				*	ALL RECORDS ARE WRITTEN WITH WORD MARKS.						
170				*							
171				ORG	1514				1514		
172			START	H	*&3		4	1514	. V20		8
173				P			1	1518	4		8
174				H			1	1519	.		8
175				CS	180	CLEAR SAMPLE TRAILER	4	1520	/ 180		8
176				RWD	NWTAPE		5	1524	U %U1 R		8
177				LCA	KBEGLD&4,5	SETUP ENTRY TO THE TAPE LOADER	7	1529	L W68 005		8
178			DETAIL	CW	SWITCH	SETUP TO READ DETAIL AND HEADERS	4	1536) V59		8
179			WRITE	WTW	NWTAPE,1	WRITE A BLOCK	8	1540	L %U1 001 W		9
180				BER	WTAPER		5	1548	B W22 L		9
181				BEF	WTAPEF		5	1553	B W36 K		9
182				NOP		INCLUDES NEXT INSTR IF NEXT HAS NO WM	1	1558	N		9
183			SWITCH	R	1	LOADS A PROGRAM DECK IF IT HAS A WM	4	1559	1 001		9
184				*							
185				*	READ DETAIL AND HEADER CARDS AND WRITE TO TAPE						
186				*							
187				BLC	FINISH		5	1563	B W45 A		9
188				CS	81	CLEAR 1-81	4	1568	/ 081		9
189				SW	1		4	1572	, 001		10
190				R		READ DETAIL CARD	1	1576	1		10
191				LCA	GMWM,81		7	1577	L T98 081		10
192				BCE	PROG,80,A	PROGRAM HEADER CARD?	8	1584	B V96 080 A		10
193				B	WRITE	NO, JUST WRITE IT	4	1592	B V40		10
194				*							
195				*	SET UP TO WRITE A PROGRAM INSTEAD OF DETAIL CARDS						
196				*							
197			PROG	SW	SWITCH	SETUP TO LOAD THE PROGRAM	4	1596	, V59		10
198				B	WRITE	WRITE THE PROGRAM HEADER	4	1600	B V40		10
199				*							
200				*	COME BACK HERE AFTER LOADING THE PROGRAM.						
201				*	THIS MUST BE AT 1604 BECAUSE THAT'S THE ADDRESS IN						
202				*	THE TRAILER CARD OF EACH PROGRAM.						
203				*							
204			WPROG	LCA	GMWM,1250		7	1604	L T98 S50		11

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
205				MCW	KB,81				,B, INSTEAD OF GM IN 81		11
206				B	DETAIL				WRITE THE PROGRAM		11
207				*							
208				*	TAPE ERROR AND EOF ROUTINES						
209				*							
210			WTAPER	BSP	NWTAPE			5	1622	U %U1 B	11
211				SKP	NWTAPE			5	1627	U %U1 E	11
212				B	WRITE			4	1632	B V40	11
213			WTAPEF	NOP	666			4	1636	N 666	11
214				H				1	1640	.	12
215				B	WTAPEF			4	1641	B W36	12
216				*							
217				*	NO MORE CARDS						
218				*							
219			FINISH	WTM	NWTAPE			5	1645	U %U1 M	12
220				RWD	NWTAPE			5	1650	U %U1 R	12
221			DONE	NOP	111			4	1655	N 111	12
222				H				1	1659	.	12
223			KB	B	DONE			4	1660	B W55	12
224			KBEGLD	BIN	BEGLDR,			5	1664	B S80	13

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
225				JOB	TRAILER CARD						
226			*								
227			*		HERE'S THE TRAILER CARD, OFFSET BY 100.						
228			*		WHEN IT'S EXECUTED, THERE ARE ALREADY WORD MARKS IN						
229			*		1, 8 AND 12.						
230			*								
231			ORG		101				0101		
232			TRAILR	SW	WM4-100,WM5-100	7		0101	, 019 027		14
233				SW	WM6-100	4		0108	, 031		14
234				SW	WM7-100,WM8-100	7		0112	, 038 042		14
235			WM4	BCE	WM6-100,GMWM,}	8		0119	B 031 T98 }	GMARK	14
236			WM5	B	400	4		0127	B 400		14
237			WM6	LCA	GOLOAD-100,352	7		0131	L 046 352		14
238			WM7	B	WPROG	4		0138	B W04		15
239			WM8	BIN	LOAD,	5		0142	B S88		15
240			GOLOAD	EQU	*				0146		
241				DC	#2	2		0148			15
242				DC	@PROGRAM TITLE HERE @	24		0172			15
243				DC	@###R@	5		0177			16
244				DC	@ 00@	3		0180			16
245				END	START				/ V14 080		

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
BEGLDR	1280	DETAIL	1536	DONE	1655	FINISH	1645	GMWM	1398	GOEQ	1347	GOLOAD	146
KB	1660	KBEGLD	1664	LOAD	1288	NRTAPE	1	NWTAPE	1	PROG	1596	RTAPEF	1366
RTAPER	1356	START	1514	SWITCH	1559	TRAILR	101	WM4	119	WM5	127	WM6	131
WM7	138	WM8	142	WPROG	1604	WRITE	1540	WTAPEF	1636	WTAPER	1622		